NATIONAL INTELLIGENCER.

THE AMAZON AND THE ATLANTIC SLOPES OF SOUTH AMERICA.

The "policy of commerce," and not the "policy of conquest," is the policy of the United States. The spirit of the age, animated by private enterprise, is every day seeking new fields for its peaceful triumphs, and commerce can accomplish throughout the world no achievement like those which note its coming and its marches up and down the Amazon and other great rivers of that greatest of water-sheds, the Atlantic slopes of South America.

Men may talk about Cuba and Japan, but, of all the diplomatic questions of the day, the free navigation of those majestic water-courses and their tributaries is to this country the most valuable and important. It surpasses them all. It is paramount.

The country that is drained by the Amazon, if reclaimed from the savage, the wild beast, and the reptile, and reduced to cultivation now, would be capable of supporting with its produce the population of the whole world. It is a rice country. The common yield of rice is forty for one. It is reaped five months after planting, and may be planted at any time of the year. Thus the farmer may plant one bushel of rice to-day; in five months hence he will gather forty from it. Planting these forty, he may in another five months gather sixteen hundred bushels. In ten months the earth yields an increase there of a thousand-fold and more.

Corn, too, may be planted at any time, and in three months is fit for gathering. Thus the husbandman there may gather four crops of corn a year. Its seasons are an everlasting summer, with a perpetual round of harvests.

It is the policy of commerce, and commerce is the policy of these United States, to open that river to steam, and its valley to settlement and cultivation, and its earth, air, and waters to the business and wants of trade and traffic. There, upon the Atlantic slope of South America, in the valley of the La Plata and in the valley of the Amazon, nature in all her ways has been most bountiful. There the vegetable kingdom displays its forces in their most perfect grandeur, and in all their might; and there, too, the mineral kingdom is most dazzling with its wealth opened to navigation, its forests to settlement, its pampas to cultivation. What commerce has done for South America is nothing to what it will do. It has fringed only the sea-coast of that continent with settlement and cultivation. The great interior has never been touched; the heart of the country is a commercial blank; nor is it to be reached except through the powers of steam and the free use of its majestic water-courses.

It is of this country, of the importance of settling it up, of sending there the immigrants, the steamboat, the axe, and the plough, with the messengers of commerce, that we wish to speak.

Let us, therefore, first see where it is, how far off it is, and what its actual condition, and then we will be enabled the better to judge as to the true course of policy which it would be best for the commercial nations of the earth to take with regard to it. The semi-continent of South America is very nearly in shape that of a right-angled triangle. Its hypothenuse rests on the Pacific; one of its legs extends from Cape Horn to Cape St. Roque. Here the right angle is formed with the other leg, which extends from Cape St. Roque, in latitude 5° south, to Cabo La Vela of the Caribbean sea, in latitude 12° north.

The longer leg is that between Capes Aven and St. Roque; it is 3,500 geographical miles in length. The other leg has only 2,500; but the hypothenuse which stands on the Andes and rests on the Pacific is more than 4,000 miles long.

This configuration exercises a powerful influence upon the climates of South America, especially as regards its heitography.

The great rivers of that country, the mighty Amazon and the majestic La Plata, are resultants of this configuration. In consequence of having the sea front which rests upon the long leg in the southern hemisphere to look southeast, the northeast and the southeast trade-winds, as they come acress the Atlantic filled with moisture, go full-charged into the interior, dropping it in showers as they go, until they reach the snow-capped summits of the Andes, when the last drop that that very low temperature can wring from them is deposited, to melt and feed the sources of the Amazon and the La Plata with their tributaries.

The northeast trade-winds commence to blow about the tropic of Cancer, and, coming from the quarter they do, they blow obliquely across the Atlantic. They evaporate from the sea as they go, and, impinging at right angles upon the South American shore-line that extends from Cape St. Roque to Cabo La Vela, they carry into the interior the vapor that forms the clouds that give the rain which supplies with water the Magdalena, the Oronoco, and the northern tributaries of the Amazon.

The volume of water discharged by these rivers into the sea is expressive of the quantity which those northeast trade-winds take up from the sea, and, carrying in the clouds, precipitate upon the water-shed that is drained by these streams. They are but pipes and gutters which nature has placed under the eaves of the great water-shed that has the Andes for a ridge-pole, the Caribbean sea and North Atlantic for a cistern.

The trade-wind region of the north Atlantic affords the water-surface when the evaporation is carried on that supplies with rains, dews, and moisture New Granada, Venezuela, the three Guyanas, and the Atlantic slopes of Ecuador.

On the other hand, the southeast trade-winds commence to blow about the parallel of 30° or 35° south. They come, too, obliquely across the Atlantic, and strike perpendicularly upon the South American coast line, which extends from Cape St. Roque towards Cape Horn. They pass into the interior with their whole load of moisture, every drop of which is wrung from them before they cross the Andes. The quantity of moisture which is taken up from the sea and rained down upon this wonderfully fruitful country may be seen in what the La Plata and the Amazon discharge back into the sea.

Now there is no tropical country in the world which has to windward, and so exactly to windward of it, such an extent of ocean in the trade-wind region; consequently, there is no inter-tropical country in the world that is so finely watered as is this great Amazon country of South America.

Along the Atlantic coast of the United States, along the coast of China and the east of New Holland, the land trends along with the direction of the trade-winds of those regions. These winds, with their moisture, travel along parallel with the land; they do not blow perpendicularly upon it, nor push their vapors right across it into the interior, as they do in South America. The consequence is, none of these inter-tropical countries can boast of streams and water-courses like those of South America.

The shore-line of Eastern Africa is arranged like that of the South American water-shed, but it has not enough to windward to supply the vapor to feed springs enough to make large rivers.

The southeast trade-winds, when the monsoons of the Indian ocean will permit them to blow, strike perpendicularly upon the east coast of South Africa, as they do upon that of South America. In the American case they blow perpetually; in the African case for not half the year. They therefore cannot give Africa half as much rain as South America receives.

At Cape Guardafui, the right angle of the African coast line is formed, as it is at Cape St. Roque for America. But the winds which cross this line between Cape St. Roque and the Isthmus have traversed the Atlantic ocean and Caribbean sea, hence they reach the land dripping with moisture; whereas in Africa the northeast trade-winds, which cross the coast line from Cape Guardafui to the Isthmus of Suez, have sucked up vapors from the Red Sea only; therefore the quantity of moisture which these winds, carry into the interior of Africa is not by any means so great as that which those of the Atlantic carry over into South America. The difference is as great as the difference of the evaporating surface exposed to the northeast trade-winds by the Atlantic on the one hand, the Red sea on the other.

The two systems of trade-winds, the northeast and the southeast, meet in the interior of South America, somewhere between the equator and the Isthmus. This place of meeting is a place of calms, and where it is there it is rainy.

This and other meteorological agents divide the seasons in the northern portions of South America, especially the valley of the Oronoco, into the rainy and the dry; six months of constant rain, six months of blighting drought. Not so in the valley of the Amazon. There the weather is agreeable all the year round; and though more rain falls there in some months than in others, as it does here with us, still there, as here, it may rain and does rain any day in the year.

Now, I think that any one who has followed me with a map will perceive why this inter-tropical region of South America, or that part of its water-shed which from Panama to the parallel of 30° or 35° south slopes towards the Atlantic, has and ought to have the most remarkable climate in the world. We have seen that Eastern Africa, and Eastern Africa alone, resembles it in configuration of shore-line alone; for the evaporating surface and the supplies of vapor are wanting, and therefore South Africa cannot be nearly so well supplied with rains, and consequently with rivers, as is South America.

In all the other inter-tropical regions of the world, in India, in Western Africa, New Holland, and Polynesia, the year is divided out into the rainy season and the dry, during the latter of which little or no water falls, springs go dry, and cattle perish, and dead bodies pollute the air. Then, too, stalks forth in those countries "the pestilence that walketh in darkness."

In the valley of the Amazon no such condition exists. There the fall of water, though copious—the river Amazon is the rain-guage—is not compressed within a few months nor accompanied by the terrible hurricanes and tornadoes which rage at the change of seasons in India.

Because the Amazon is in a tropical country, the public is disposed to judge of its climates by comparing them with the climates of other tropical countries, as India, for example; but for the reasons stated, and because there are no monsoons or other conditions to cause the valley of the Amazon to be parched with drought at one season, and drenched with rains at another, as India is on one hand, and the Oronoco country on the other, there is no more resemblance between the climates of India and the Amazon than there is between the climates of Rome and Boston. And any one who would infer similarity of climate from the fact that Boston and Rome are in the same latitude, would not be more out than he who infers similarity of climate between India and Amazonia.

Now, what ought to be the condition of an inter-tropical country whose plains are watered with frequent showers, unaccompanied by a single drought during ages of perpetual summer? Why, fertility and salubrity, for in such a climate any thing and every thing will grow. The rapid production and constant decay of vegetable matter that have been going on there for thousands and thousands of years must have made the soil rich with vegetable mould.

The fact that vegetation there is in perpetual activity; that there is no period of vegetable repose; that as fast as one leaf falls and begins to decay, other leaves just putting forth absorb its gases, makes the valley in the Amazon one of the most salubrious and delightful of climates.

Having shown that the climate of the La Plata and Amazon country is a climate without droughts, and that it is a moist and warm climate, I have established enough to satisfy any one that the soil there, whatever be the sub stratum, must have upon it a rich vegetable mould, which the decay of the most rank vegetation during ages must have formed.

In my next I shall proceed to show what travellers and men of science who have explored various portions of this wonderful region of country say as to its productions, its commerce, and the navigability of its water courses.

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NATIONAL INTELLIGENCER.

THE AMAZON AND THE ATLANTIC SLOPES OF SOUTH AMERICA.—No. II.

I proceed now to show the present condition with the future resources and commercial capabilities of the great South American water-sheds. I will confine my attention to the rivers Amazon and La Plata, to their tributaries, and the valleys drained by them. But first let us give our attention to the La Plata, and compare the extent of country drained by it with the extent drained by rivers in the Northern Hemisphere.

The valley of the Amazon lies in both hemispheres; it is the largest river-basin in the world, but it belongs exclusively neither to the North nor to the South. The Mississippi, then, it will be perceived, drains the largest river-basin in the Northern and the La Plata the largest in the Southern hemisphere. Both these streams run from north to south, each one embracing a great variety of productions, and traversing many diversities of climate.

The area of the principal river-basins which are drained into seas that are accessible to ocean commerce may be thus stated:

In America.—The Amazon, area 2,048,480* square miles.
North do.—The Mississippi, area 982,000 " "
South do.—The La Plata, area 886,000 " "
Europe—The Danube, area 234,000 " "
Africa.—The Nile, area 520,000 " "
Asia-China.—The Yang-tse-Keang, area 547,000 s. ms.
India.—The Ganges, area 432,000 square miles.

It will thus be observed that the Valley of the La Plata in area is the third in the world; that it is twice as large as the Valley of the Ganges, and more than three times as large as the largest river-basin in Europe.

The basin of the La Plata embraces all the latitudes, and more too, that are to be found in the valleys of the Indus, the Ganges, and the Irawaddy, the great river-basins of India. It consequently has all the agricultural capacities, and more, that are to be found in the climates of India. These great resources of the La Plata for the most part lie dormant. They are hidden in the bosom of the earth, or concealed in the recesses of the mountains. The waters of the La Plata flow through climates that are favorable to the growth of sugar, of tea and coffee, of rice, hemp, and tobacco, of cotton and corn, of drugs, woods, dyes, and spices, and of almost all the agricultural staples of the earth.

The Rio de La Plata lies wholly within the Southern hemisphere, and it is the greatest river that does so lie; consequently it has opposite seasons with those of the Northern. When the husbandman is sowing in the North, then he who tills the earth in this beautiful river-basin will be gathering his crop; and consequently the planter, and the farmer, and the merchant of the La Plata will have control of the Northern markets for six months of every year without a competitor.

The Rio de La Plata, properly speaking, is that arm of the sea between the parallels of 33° and 36° of south latitude. Its breadth is a hundred miles or more, according to the place of measurement, and it is formed by the junction of the Parana and the Uruguay. I treat of all the country drained by these rivers and their tributaries as the Valley of the La Plata.

The Uruguay is a beautiful stream. It takes its rise in the Brazilian province of Santa Catarina, on the western slopes of the "Serra do Mar," or the sea range of mountains. Its course is first westwardly and then southwardly; it is about seven hundred miles long; drains a rich, fertile, and tolerably well-settled country. For part of the way it is the boundary between Brazil, with the Banda Oriental on one side, and the Argentine Confederation on the other.

The Parana is a majestic river. It is formed by the junction of the two Brazilian streams, the Rio Grande and the Paranahiba. The former takes its rise near the parallel of 20° south, not far from the sea shore, and in the wealthy province of Minas Geraes. The valley in which the head-waters of this river are gathered into the main stream is most magnificent. It is about two hundred miles broad in the widest part, by four hundred miles long. The course of the Rio Grande through it is due west, and for about five hundred miles, until it meets the Paranahiba coming from the northward, where its sources interlap, and almost intermingle with those of the Amazon.

The population of the two interior provinces of Minas Geraes and Goaz, in which these two tributaries of the Parana take their rise, and in which they lie, is for the former one million, for the latter one hundred and fifty thousand.

The Japanese-like policy which has been observed with regard to scientific explorations of the La Plata and its tributaries has kept the world in the dark as to many parts of that Valley.

Dr. Francia established in Paraguay, many years ago, a government founded upon the Japanese system. Rosas attempted an imitation of this policy so long as he was in power; and Brazil has always practised it. So that geographers really know very little as to the Brazilian tributaries of the La Plata, their navigability, and the commercial resources of the countries which they drain

According to the map "Do Imperio do Brazil," published in 1846, under the auspices of the Geographical Society, Rio de Janeiro, and which is now before me, the Parana, for the first five hundred miles below the junction of the Rio Grande and the Paranahiba, runs through uninhabited parts of the provinces of Gayaz, Matto Grosso, and Sao Paulo. Passing these uninhabited parts, it then runs through and among the Spanish republics of that region for about twelve hundred miles to its entrance into the Plata. Along this part of its route the country is pretty well settled, and, according to Montgomery Martin,† whose authority is more recent than that of the map of the Geographical Society of Brazil, must be in a high state of cultivation. Writing last year upon this river, he says:

"During the six or eight months that the Parana, or Plate river, was recently opened to European commerce, upwards of sixteen millions dollars' worth of goods were exchanged for produce, and this without any previously organized mercantile establishments or system. Two convoys of merchant ships, one of 110, and the other of 76 vessels, came down the river with full cargoes. It is true that this extent of trade was partly attributable to the accumulation of property owing to the previous interdiction of commerce by General Rosas, whose exclusive policy is an imitation of that of Dr. Francia, as he has himself boasted. He is therefore entirely hostile to mercantile, or indeed to any intercourse, especially with Europeans. Were Rosas to succeed, he would form a State such as Japan has been for the last two centuries."

The commerce of this river, I know, is valuable; but whether it be so very valuable at this time as the above extract from Martin would make it, I doubt.

But, suppose it were one million instead of sixteen that was brought down through this unexpected free navigation for six or eight months, what would it not be under regular steam and free navigation at the end of six or eight years, when the steamboat and commerce shall have stimulated the productions of the country up to the capacity of its industrial capital?

Leaving the Parana, and travelling still further west, we come next to the Paraguay, the most magnificent tributary in this water-shed. Following it in its windings, it is navigable to the distance of about two thousand miles from the sea. It is the Missouri of the La Plata valley.

A friend who has been residing in the capital of the Republic of Paraguay for several years returned thence a few months ago. I shall, therefore, draw upon him for information touching this interesting river and region of country: also, Francis del Castelnau, who travelled through that country in 1848-9, is quite full.

According to Hopkins, Paraguay is but another paradise.‡ Of this country and its commercial resources, says he:

"I can speak with the greatest certainty, from my own personal knowledge. Almost divided by the tropic of

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* Including the Oronoco.

† See his Geographical and Statistical Atlas.

‡ See Bulletin of the American Geographical and Statistical Society, vol. 1, Memoir on Paraguay, by E. A. Hopkins, Esq., United States Consul in Paraguay.

Capricorn, its surface is like a chess-board, checkered here and there with beautiful pastures and magnificent forests. Unlike all other lands with which I am acquainted, it seems destined especially for the habitation of man. Here, in the eastern portion of our own land, the first settlers found the whole country covered with woods; west of the Mississippi the other extreme exists, in the vast extent of prairie, destitute of timber. On the north of Brazil, in a similar manner, are unbroken forests; in its southern parts, and throughout the Banda-Oriental, Entre-Rios, Corrientes, and the Argentine Republic, we find continuous pampas, like our prairies, in many instances without bearing the necessary fuel even for household purposes. Not so in Paraguay, where, added to a sufficiency for building fleets of a thousand steamers, its forests teem with every description of ornamental and useful woods.

"Beginning with the headwaters of the river Paraguay, we find the productions upon the Brazilian side to be gold and precious stones, sugar, molasses, hides of extraordinary size, hair, tallow, wax, deer, and tiger-skins, with rice, corn, and the different manufactures of the mandioca root; in Bolivia, gold and precious stones, silver, coffee—considered by good judges to be equal to Mocha—and Peruvian bark.

"Though undoubtedly we could draw from these two countries many other productions of tropical America, yet it is in Paraguay that we find the greatest wealth of all these valleys."*

Of medicinal herbs, they yield in great profusion "rhubarb, sarsaparilla, jalap, bezonia indica, sassafras, holy-wood, dragons' blood, balsam of copaiba, nux vomica, liquorice, and ginger."*

Here, too, are found dye-stuffs of the most exquisite tints. Among these he includes cochineal, two kinds of indigo, a "vegetable vermilion, saffron, golden rod, with other plants, producing all the tints of dark red, black, and green."*

In the forests are found sixty varieties of wood, valuable for ship building, or as timber, or for cabinet work. Among them are the "*Seibo* tree," which, "when green, 'is spongy and soft as cork, and can be cut like an apple, 'but when dry it is so hard as almost to defy the action 'of steel; the *Palo de Vivora*, or snake-tree, whose leaves 'are an infallible cure for the poisonous bites of serpents; 'the *Palo de leche*, or milk tree, may be called a vegetable 'cow; and the *Palo de borracho*, or drunken tree, a vegetable distillery. The içica resin is found at the roots of 'trees under ground, and is a natural pitch, ready prepared to pay the seams of vessels."*

Many of them are said to yield gums and drugs of the rarest virtues, and of the most exquisite perfume. Though, coming from a far country, which commerce, in her loftiest flights has not yet been able to reach, many of these productions are not yet known to pharmacy or the mechanic arts. "They comprise," says Hopkins, "some of the 'most delicious perfumes and incense that can be imagined. Others again are like amber, hard, brittle, and 'insoluble in water. Some cedars yield a gum equal to 'gum arabic; others a natural glue, which, when once 'dried, is unaffected by wet or dampness."

Here, too, in these wilds flourish side by side the India-rubber tree, the Vanilla, with its sweet-scented bean, and the *Palo-santo*, from which the gum guiacum of our commerce is gathered.

Wild, too, in those wonderful forests grow, mature, and decay, annually and in large quantities, two or three kinds of hemp, the *nux soponica*, or soap-nut, the cocoa, yerba matté of superior quality, two kinds of cotton with vegetable oils, and wax in vast quantities.

The pampas are grazed by immense herds of cattle and horses; and great quantities of "hides, hair, horns, bones, tallow, &c. are lost for want of transportation."

"Upon the fertile alluvial banks of so many large streams, sugar-cane, cotton, tobacco of a superior quality, rice, mandioca, Indian corn, and a thousand other productions vegetate with profusion; whilst seven varieties of the bamboo line the river banks and dot the frequent lakes with islets of touching beauty."*

In short, this traveller thus sums up his account of this glorious valley:

"We have found the forests spontaneously producing every thing necessary for the comfort and luxury of mankind, from the beautiful cotton-tree that affords him clothing, to the colors which suit his fancy as a dye; and from the woods that furnish his ship and house, or ornament his *escritoire*, to the herb that cures his sickness, or the incense that delights his olfactories. It is only necessary to add that the climate is favorable to all the useful grains and table vegetables, with delicious fruits to support the frame and gratify the palate."

But from the Republic of Paraguay, where Hopkins was, to the mouth of the La Plata, there were only some 1,500 miles of river navigation. Let us, therefore, ascend higher up the beautiful Paraguay, cross over into Brazil, ascend this river through the district "Dos Diamantes," to the city of "*Diamantino*," and thence trace its sources, up over their beds of bright jewels and golden sands, to their very fountain-head as they leap spangled and sparkling from the "*Diamond* mountains."

Standing on these, we may contemplate the great "Divide," which separates the waters—if they be separated—of the Rio de La Plata from the waters of the Amazon.

This ridge extends from east to west over the distance in a straight line of more than 2,000 statute miles. On one side the streams run south; on the other they come north; and on both sides they wash down from this ridge gold, diamonds, and other precious stones. This auriferous and rich mineral region embraces many degrees of latitude, and extends through 30° of longitude. I propose to speak of it at another time.

It is a question whether the waters of the La Plata and the Amazon do not unite through a natural canal, as those of the Amazon and the Oronoco do through the Casiquiari, and thus afford an inland navigation from Buenos Ayres in 35° south, to the mouth of the Oronoco, where it empties in 11° north into the Caribbean sea. Truly such a navigation would be bringing the commercial drainage of the Atlantic slopes of South America not only at our feet, but it would be emptying its treasures into the very lap into which our own Mississippi pours its waters, its surplus produce, and its wealth.

At any rate, whether there be a natural canal there now or not, we may look forward to the time when settlement, steam, and civilization shall have taken root upon the great Amazon water-shed, to see canals and channels which, if nature have not completed, art will, by which the La Plata will be turned upside down, and its mouth placed, for all the practical purposes of commerce, under the equator where the Amazon discharges itself into the sea.

Castelnau, a French savant, who was sent by Louis Philippe, in 1843, to explore the interior of the country, and who went from Rio along this Divide over to Bolivia, thence to Lima, and then across the Andes and down the Amazon to its mouth, gives much new and valuable information concerning this whole country. He was gone four or five years, and the first part of his travels has just been published.

The principal object of his expedition, he says, "was to study in all its bearings the vast basin of the Amazon, which is destined to play a grand part in the future history of America;" "for," he adds, "the utter neglect of this river-basin by the nations of Uurope will one day greatly astonish the political and commercial world."

"An excursion in the northern parts of the Province of Matto Grosso," says Castlenau, "afforded us an opportunity of determining the position of the sources of the Paraguay, as well as of the Tapajos; and we could contemplate at the same time the arms of the two greatest rivers in the world, the La Plata and the Amazon, as they leaped from the bowels of the earth at our feet and interlocked one with the other. Again, and as if to render more attractive to men this curious and interesting port, nature has placed her mines of diamonds in a region of country where their value is small in comparison with the great advantages which commerce is one day to reap from this marvellous junction of waters."

It was in this region that the intrepid old Sergeant Joao de Souza found a natural tunnel through which the Sumidouro—so called because it runs for about the quarter of a league under a mountain—carries its waters to pay tribute to the Amazon.

Setting out from Cuyaba, in 1746, he descended the river of that name to the Paraguay, which he ascended to the mouth of the Seputuba. Following this to its sources, he then cut with a hatchet a way through the forest for three leagues, over which he transported his vessels, and embarked them upon the Sumidouro. Following this river till it disappeared under a mountain, he then disembarked, and sent his vessels through. Then going

* Hopkins.

across the mountain to the place where the river comes out again, he had the good luck to find his vessels had passed through without damage.

Reimbarking, he then descended the Arinas and Amazon to Pará, where he was put in prison on account of his discoveries; for it was the policy of Portugal, and has since been that of Brazil, to be as exclusive as Japan, with regard to these great river-basins, and the treasures they contain.

Pardon me, Messrs. Editors, if I have got ahead of my subject; but the Amazon is so very attractive it has unavoidably drawn me off from the valley of the La Plata, to which, however, I promise to return in my next.

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THE AMAZON AND THE ATLANTIC SLOPES OF SOUTH AMERICA.—No. III.

The Republic of Paraguay lies between the parallels of 22 deg. and 28 deg. south latitude. It may be said, therefore, to be *extra*-tropical.

The Brazilian province of Matto Grosso lies between the parallel of seven degrees south and the Tropic of Capricorn. It is *inter*-tropical. Its productions, therefore, it may be supposed, are different in many respects from those of Paraguay.

This province, in its greatest length and breadth, measures sixteen degrees of latitude by sixteen degrees of longitude.

Passing midway through it on a zigzag course from east to west is the great "divide," which separates the waters of the Amazon from the waters of the Rio de la Plata. From one end of this ridge to the other, from the Atlantic to the Andes, gold, diamonds, and precious stones are dug from its sides or washed from its streams.

On the northern slopes of it the Tocantins, the Chingu, the Tapajos, and the Madeira, tributaries to the Amazon, and larger than any of the rivers of Europe, take their rise. Also, the Paranahiba, which empties directly into the Atlantic, has its sources among the northern ravines of this auriferous slope.

On its southern declivities the fountain-heads of the Parana and Paraguay are found sending forth bright sparkling streams, which, like threads of silver, are seen winding their way through the most luxuriant vegetation and over sands of gold and pebbles interspersed with brilliants, to unite and swell out into the mighty "river of silver," as the La Plata is called.

Let us therefore leave the country of old Francia for that of Matto Grosso and Brazil.

The traveller leaving the republic, and ascending the Paraguay to the celebrated gold and diamond region of Matto Grosso, finds on either hand as he goes up a charming country diversified with pampas and groves of great beauty and extent.

Turning up the Mendingo, which comes in from the east, and ascending the same seventy or eighty miles, he comes to the village of Miranda.

The people in the neighborhood are industrious. They raise large herds of cattle and great numbers of horses. They cultivate in great abundance sugar-cane, Indian corn, pulse, manioc, and cotton. The climate is salubrious and delightful—many of the inhabitants reaching the age of 100 years.

It was here that Dr. Weddell, the botanist, saw the "nicaya" with its elegant foliage, the fruit of which was described by the Indians to be of an oblong form, and to contain a natural confection of which they are very fond.

Throughout this region they have immense quantities of the beautiful violet and other ornamental woods, which are used for firewood; for, though of great value in the cabinet-shop, the people here have no other way, notwithstanding their fine navigable streams, of getting these woods to the seaboard except on the backs of mules.

Returning to the Paraguay, the scene is enlivened by *the immense* herds that are feeding upon the now evergreen pastures of the plains. The value of these herds consists chiefly in their horns and hides.

The village of Poconé, at the mouth of the Cuyaba, is one of the most flourishing places in the interior of Brazil. Castelnau says (and, until otherwise stated, he is my chief authority for what follows) that as many as 8,000 or 10,000 head of cattle are owned by single individuals in that village.

Passing Poconé on the right, and taking the left fork of the river which retains the name of Paraguay, we reach, at the distance of about 150 miles above it, the frontier Brazilian fort of Villa Maria.

The guns that are mounted in this fort were brought up the Amazon to the Tapajos, thence by that river up the Arinas, thence by portage across the diamond regions to the headwaters of the Cuyaba into the Paraguay, and so up stream to Villa Maria.

On the west there are several fine rivers, which, rising in Bolivia and Brazil, fall into the Paraguay above the mouth of the Cuyaba. Several of these streams interlock with the headwaters of the Madeira, which is to the Amazon what the Missouri is to the Mississippi. I shall have occasion again to speak of these tributaries, of the splendid country watered by them, and of the portage between them.

Villa Maria is in the midst of the great ipecacuanha region of Matto Grosso. In 1814 Francisco Real was sent to explore the diamond region of this province. But it turned out with him as I apprehend it would turn out with the pioneers of commerce now: as rich in diamonds as are the streams and gravel-beds of this province, the riches of the vegetable were found greatly to exceed those of the mineral kingdom.

This immense natural plantation includes within one field an area of three thousand square miles. The crop is perennial, and may be gathered the year round. One expert hand may collect fifteen pounds of this root in a day, which brought in Rio one dollar the pound. The work of an ordinary hand is five pounds the day, and the cost of laborers from three dollars and forty cents to four dollars per month.

Castelnau estimates that from 1830 to 1837 not less than 800,000 pounds of this drug were exported from this province to Rio. This abundant supply brought down its price. But here is the singular feature of this trade: this produce is taken from the very banks of one of the noblest rivers in the world, and transported by mules for the distance of twelve hundred miles to the sea-coast, in spite of Nature's great highway.

The ipecacuanha delights in flat or sandy soil, and is found also in great abundance on the banks of the Vermilho, the Seputuba, and the Cabaçal.

Vanilla is also abundant. Its price when Castelnau was at Villa Maria was sixty cents the pound.

But I intended to follow this intelligent traveller up into the diamond country, and with him to visit the "divide" between the waters of the Paraguay and Tapajos.

Ascending the Cuyaba, which is the principal Brazilian tributary of the Paraguay, about 150 miles from its mouth you come to the flourishing city of Cuyaba, the capital of the province of Matto Grosso. It has a population of about 7,000. It carries on a brisk commerce with Rio by caravans numbering from 200 to 300 mules each. This commerce consists of hides, jaguar, and deer-skins, gold dust, diamonds, ipecacuanha, and the like. The freight to Rio is almost $15 the 100 lbs.

Here, perhaps, among all the wonderful things that are found in these great river basins of South America, is the most wonderful of them all—a city the capital of a province larger than all of the "Old Thirteen States" of this Confederacy put together, and occupying on the banks of the La Plata very nearly the relative position which St. Louis occupies on the banks of the Mississippi, carrying on its commerce not by steam and water, but by the mule load, and over such a distance from the sea coast that the time occupied by each caravan in going and returning is from ten to twelve months.

That this state of things should, in the middle of the nineteenth century, be found to exist in the middle of South America, upon one of the finest of steamboat watercourses in the world, whose navigable tributaries are owned by no less than five separate and independent na-

tions, and which the "policy of commerce" has not yet demanded to be thrown wide open to navigation and commerce, will in after times be regarded as more wonderful than any other reality of this wonderful region.

Nay, Brazil has, within a stone's throw of this very capital, and by easy portage, the navigable waters of her own Amazon; and yet so fearful has she been that the steamboat on those waters would reveal to the world the exceeding great riches of this province, that we have here re-enacted under our own eyes a worse than Japanese policy, for it excludes from settlement and cultivation, from commerce and civilization, the finest country in the world; a country which is larger than the continent of Europe, and in which there is an everlasting harvest of the choicest fruits of the earth.

Cuyaba is in the midst of the gold region. The metal is found in veins, among the pebbles at the bottom of the brooks, and in fine grains in the soil. After every rain the servants and children may be seen gathering it from the washings of the streets in Cuyaba.

They get in this city a drug from the Amazon called *guarana*, of which the consumption is enormous, and to which medicinal virtues the most astonishing are ascribed.

On the head-waters of the Cuyaba is the celebrated diamond district of Brazil; and though in this day of sober realities it cannot be said that the city of Diamentino, the principal village of the district, has its streets paved with diamonds, yet these jewels are found there, mixed with the earth, like gold in the "diggings" of California.

Just before Castelnau was there a man planting a post to which to tie his mule found a diamond of nine carats. The children here wash the earth in the streets for gold, and diamonds are sometimes found in the crops of the fowls.

This stone is found at the bottom of the streams, and the most celebrated for it are the Ouro, the Diamentino, and the Santa Anna, in their whole length, the Areias, the San Franciscos, of which there are three, and on the Paraguay itself for a considerable distance down the main stream.

The Sumidouro, which is on the Amazonian side of this ridge, is said also to be exceedingly rich in diamonds.

A Spaniard, one Don Simon, with his slaves, washing on the Santa Anna during the dry season *only*, got in four years 7,000 carats of diamonds.

Castelnau estimates the whole yield of diamonds from Brazil to the end of 1849 at near $80,000,000.

It is the mineral wealth of this water-shed between the La Plata and the Amazon, operating with its gold and its diamonds upon the cupidity of her counsellors, that has been the curse of Brazil.

At first the diamonds belonged to the Crown, and no person was allowed to visit the diamond district unless under the strictest surveillance. Military posts were established throughout the whole region to prevent people from gathering its mineral wealth.

Suppose the United States had established military posts in California to prevent the people from going there and digging for gold, what would have been the condition of that State now in comparison to what it is? It would have been like the interior of Brazil now is.

The policy of Brazil has been not only to shut out commerce, but to shut up from observation the wonderful resources, capabilities, and capacities of the finest country in the world; and, among the immense treasures which lie dormant and undeveloped there, I class the precious stones and metals as among the least of the truly valuable.

There is now in Rio the original of an order issued when Humboldt was travelling in South America, ordering that great man to be made prisoner should he once set foot on Brazilian territory.

And it has been but two or three years ago that application was made by this Government to that of Brazil for permission to send a steamer up the Amazon to explore it, not for the benefit of the United States alone, but for the good of commerce, science, and the world. Permission was refused. The consequence was, two officers of the navy were ordered to cross over the Andes from Lima, and descend the Amazon as they might. One of these officers (Lieut. Herndon, U. S. N.) has just returned, and is now engaged with his report; the other (Lieut. Gibbon) is still on his way down.

Thus, in consequence of this Japanese spirit that still lingers in Brazil, our officers, in the pursuit of science and of knowledge for the benefit of the human family, were by this dog-in-the-manger policy compelled to undergo all sorts of exposures, and living on monkeys and sea-cows, to descend that mighty river from its sources to its mouth on rafts, in dug-outs, and upon such floating things as they could find.

On the ridge to the north of Diamentino, Castelnau saw the waters of the La Plata and the Amazon flowing from the same farm:

"We found (says he) one of the very sources of the Amola, (a tributary of the Cuyaba,) which rises in a ravine of the plateau, and flows toward the south; it is N. N. W. from the fork of it, which they say is a little more elevated. The two sources unite almost immediately in the valley to form the Amola, which crosses the road of Kebo. The farm of Estivado, where we were, is situated on one of the most interesting points which this continent presents. There, in fact, and at a few steps one from the other, arise the sources of two of the greatest rivers in the world—the Amazon and the La Plata. It may one day be very easy to establish a communication between these gigantic streams; for the master of the house, as he told us himself, had attempted, simply for the purpose of irrigating his garden, to turn the waters of one river into the bed of the other. The source of the river Estivado, the true branch of the Arinos, is found in a hollow in the plateau, whose shed is turned toward the north about 650 feet east of the house of the same name; and 275 feet west of this appears in a little grove the source of an affluent of the Zombador, which is known to be one of the tributaries of the Cuyaba.

"The farm of Estivado is therefore on the dividing line of the waters which flow north and those which flow south. The same phenomenon is observed near Macu: in the times of great floods there is a torrent whose waters at a certain point separate in such a manner that on the one hand they flow to the Cuyaba and on the other to the Tapajos.

"All this great plateau is on the dividing line of the waters. The superintendent of Estivado told us that once a canoe had been carried from Cuyaba in the Arinos by means of a portage of only four leagues across the Chapola, and the proprietor of Macu had proposed to establish this communication."

Diamentino carries on a direct trade with Para, by the Arinas, the Tapajos, and Amazon. The place of embarkation is ten leagues from the village, and the voyage up and down, thence to Para, occupies eight months. The Tapajos is said to be sickly.

The foreign merchandise that reaches Diamentino by this route is sold at an advance, on the average, of eight hundred and fifty per cent. on its price in Para, which is some fifty or one hundred per cent. on New York prices.

Were this trade large, as at present it is not, and without steamboat navigation can never be, Pennsylvania no doubt would rejoice in it; for iron in Diamentino and the province of Matto Grosso generally sells at $25 the 100 lbs.—*five hundred and fifty dollars the ton!*—a price which ought surely to satisfy the iron men of any country. Salt sells at $18 the 100 lbs.; flour at $40 per barrel.

Castelnau quotes the Para and Diamentino prices of thirty-four of the principal foreign articles of trade between the two places, and the average advance in Diamentino upon these Para prices is, as I have stated, 850 per cent

Passing from this benighted country over into Bolivia, Castelnau came to an entirely different sort of people. Industrious and thriving, the Bolivians, as they comtem-

plate their lovely rivers, the Pilcamayo and the Madeira, sigh for the steamboat and the free navigation of the La Plata and the Amazon.

The Pilcamayo takes its rise under the south wall of their beautiful "Silver City," as Chuquisca is called. The Vernejo, another large Bolivian tributary of the La Plata, has its source further south. After a course of a thousand miles to the southward and eastward, these streams empty into the Paraguay; and so anxious is Bolivia for the navigation of these rivers, that she has, I am told, offered a bonus of twenty thousand dollars to the first steamboat that will ascend the Pilcamayo to the head of steam navigation.

Chuquisca stands on a spur of a mountain which juts out from the Andes, and constitutes the divide between the head-waters of the Pilcamayo and the Madeira. This latter, taking its rise under the north wall of this city, and joining a tributary which comes down from the city of Cochabamba, takes a sweep of some three hundred miles to the southward and eastward; then, recovering itself, and swollen by the numerous tributaries received by the way, it turns north towards the Amazon, and flows by Santa Cruz de la Sierra—the capital of the republic—a magnificent sheet of water.

From the two first-named cities, by the windings of the Madeira to the ocean, the distance is upwards of two thousand miles, more than half of which is in Bolivian territory. Well may that Republic, therefore, sigh for river steamers and the right of way up and down the Amazon.

The climate of Bolivia is one of the finest tropical climates in the world. Indeed, its climates and productions may be considered to include those of all the habitable portions of the globe.

Here, one seated at the foot of a mountain, and surrounded with the luscious fruits of the tropics, may, casting his eye up towards the snow-capped peak above him, take in at one view the whole range of the vegetable gammut. Beginning with the Chiremoya, the pine-apple, the orange, and the vanilla, as they cast their fragrance around, he passes through, as he ascends, groves of the olive and the vine, the peach and the pear, until finally, having completed the vegetable notation in the order of production through the Torrid and the Temperate zones, he reaches the Frigid, and with its cap of snow he finds the summit crowned with the mosses and the lichens of the Polar regions.

About one-half of Bolivia is in the valley of the Amazon; one-fourth in the valley of the La Plata; and the rest, which is not desert or mountain, is in the valley of Lake Titicaca, that inland basin in which the Incas and civilization of Peru had their origin.

I will in my next speak of Bolivia and her Amazonian water-shed. INCA.

No. IV.

Bolivia has but one seaport on the Pacific; that is Cobija, an open roadstead, and a miserable village at the head of the great desert of Atacama. The land transportation between this port and the agricultural districts of the Republic is too rough, too tedious, and too expensive ever to admit of its becoming a commercial emporium. The direction in which Bolivia looks for an outlet to market for her produce is along her navigable water-courses that empty into the Amazon, and then down that stream to the sea, where the winds and the currents are such as to require that produce to pass by our doors. Bolivia understands this, and her President has expressed the most earnest desire to draw closely the bonds of friendship, commerce, and navigation which are destined to bind his country to this.

Bolivia, we have seen, owns navigable streams that are tributary both to the Amazon and the La Plata. The free air of heaven and the glad waters of the earth were put here by the Almighty for the well-being of mankind. "Use without exhaustion" is the only condition annexed by the laws of man to the air and water being considered as the common property of the world.

Have not, therefore, Bolivia and the seven other independent nations that own navigable streams emptying into the Amazon or the La Plata, but which do not own its mouth, the right to follow and to "use without exhaustion" each its own navigable waters to the sea? And does not the "policy of commerce" require the enforcement of that right, so far as it concerns any or all of these eight upland nations which may wish to trade with us and the rest of the world through those natural channels and commercial highways?

This is one of the questions that I purpose to consider; but, before showing who it is that by a Japanese policy here at our doors is shutting out commerce from the finest portions of the world, I wish to show that the free navigation of the Amazon is not an abstraction, but that there are now there, in actual existence, all the elements of a profitable, large, and growing commerce, and that therefore the question is one of practical importance. I will speak of the productions of this interesting—I had almost said classic—land.

In the Puna country of Bolivia we find the llama, the vicuna, and the alpaca. Immense flocks of sheep feed in its pastures and lie down upon its hills.

My friend Lieut. Gibbon, who about two years ago was sent with Lieut. Herndon, by the Navy Department, to explore the Amazon from its sources to its mouth, writes that it is a wool-growing country, that immense flocks of sheep are tended there; indeed, he says the country is over-populated.

Speaking a few weeks since with a Northern manufacturer upon this subject, he informed me that he had then just bought $100,000 worth of this Puna wool, which, instead of coming down the Amazon, in sight of which almost it was clipped, the Japanese policy that keeps the mouth of that river closed had compelled to go up into the region of the clouds in order that it might cross the Andes and reach the free waters of the Pacific. Its voyage was then around Cape Horn to Boston.

Chuquisaca, or the "city of silver," is situated, as already stated, on the "divide" between the Amazon and the La Plata. On one side the waters of the Pilcamago flow south, on the other those of the Madeira flow north, on their way to the "king of rivers."

Near by Chuquisaca is Potosi. Here we pass from the regions of gold and diamonds to those of quicksilver and silver.

Since the discovery of the mines of Potosi there have been extracted from them sixteen hundred millions of dollars. The vein is said to be as rich now as ever it was, but it is not worked for the want of mechanical force, such as steam and the facilities of commerce alone can give.

It is from the Atlantic slopes of Bolivia that we get the bark for the manufacture of quinine. The cinchona, or Peruvian bark as it is called, is gathered there on those navigable water-courses of the Atlantic, and taken thence, on the backs of sheep and asses, six hundred miles across the Andes to the Pacific.

Two million dollars' worth of this bark was gathered there in the last year. Does not this afford a commercial basis sufficient to support steam navigation up the Amazon to Bolivia? Bolivia has there a thrifty and industrious population of a million and a half, whose commercial wants would be supplied by this new route. One of her cities, Potosi, has been supplied with water at the cost of $3,000,000 to construct the works. Can commerce with such a people be an abstraction? The productions of the eastern slopes of Bolivia are thus described by Castelnau:

The productions of the country are in great variety.

Sugar cane, which is gathered eight months after planting, is the staple of the province of Circado.

Coffee, successfully cultivated in this province, as well

as in that of Chiquitos, yields fruit in two years after being planted, requiring but the slightest care.

The cacao, recently introduced into these two provinces, bears in three or four years at most.

The tamarind, which succeeds in the same localities, but especially in the country of Chiquitos, requires five years.

Cotton yields annual crops: there are two species, the white and the yellow.

Tobacco grows, so to speak, without cultivation in the province of Valle-Grande, in which it is the principal article of trade.

Indigo, of which there are three cultivated species and one wild, is equally abundant.

Maize ripens in three months, without regard to season. It is cultivated more particularly in the province of Circado.

The Cassada produces in eight months after planting. There are two species of it—the one sweet, the other bitter; the former is a substitute for the potato, and even for bread itself; the latter serves only to make starch.

There are many varieties or species of bananas, which produce a year after planting. They are cultivated especially in the province of Circado.

Two species of rice, white and red, cultivated both in the province of Circado and Chiquitos, yielding crops every four or six months. It is said to grow wild in the country of Chiquitos.

The vine, which flourishes particularly in the province of Cordillera, when it was cultivated in the missions until the epoch of independence, is not now made use of. It will perhaps hereafter be one of the principal products of that country.

Wheat, barley, and the potato could be cultivated with advantage in the provinces of Chiquitos and Cordillera, but at this time they are neglected except in the province of Valle-Grande.

The culture of coca has commenced in the province of Circado, where it is found wild; so, also, the quinquina on the mountains of Samaïpata.

As already mentioned, fruit abounds in this region—oranges, lemons, citrons, figs, papayas, pomegranates, muskmelons, watermelons, chirimoyas, which the Brazilians call *fruta do conde*, pine apples, &c. The last mentioned of these fruits grows wild and in great abundance in the woods of Chiquitos. We met with it particularly the day before our arrival at Santa Ana; it is fine flavored, but leaves such a burning sensation in the mouth that I bitterly repented having tasted it.

In the province are gathered in great abundance jalap, quinquina bark, sarsaparilla, vanilla, voucou, copahu, ipecacuanha, caoutchouc, copal, &c.

Dye-woods, cabinet-woods, and building timber abound. The inhabitants gather with care great quantities of gums, roots, and barks to which they attribute medicinal virtues of every kind. At several points in the department, especially in the provinces of Valle-Grande and Cordillera, are found iron and traces of mercury. Gold is found in the province of Circado, near the pueblo de San-Xavia. Mines of silver were worked in the mountains of Colchiis by the Jesuits. Don Sebastian Rancos, while he was Governor of Chiquitos, announced to the Government that diamonds of a very fine water had been found in the brooks about Santo-Corazon.

So anxious is Bolivia for the introduction of the steamboat upon her rivers that she has offered for it, in fee simple, twenty thousand square miles of her richest lands.

To add to the interest, the resources, the charms, and wealth of this country, there are the hot springs of Tolula, with their wonderful properties. The ruins of Samaïpata and Tiahuanaco, which, with their symbols and their hieroglyphic records, tell of a people anterior to the Incas, and, in the opinion of Castelnau, as superior to them in civilization as the conquerors were.

The forests of the Madeira valley, the passage through which, notwithstanding all that he had seen on his way from Rio through Brazil to this point excited to raptures the imagination of this observant traveller. "The landscape," says he, "was the most beautiful, and the vegetation, which, changing its aspect every instant, constantly presented new objects to us."

The beautiful valleys of the Cordilleras, which produce the coca plant, were to him objects also of great interest. "This vegetable," says he, "has properties so marvellous that it enables the Indians, without any other nourishment the while, to perform forced marches of five or six days." It is a stimulant, and, by chewing it alone, the Indians will perform journeys of three hundred miles without appearing in the least fatigued.*

In the province of Chichos are many mines of silver and vast herds of cattle.

In the province of Lipaz, where the climate is cold, and the agricultural staple barley, llamas, vicunas, alpacas, with deer and the beautiful chinchillas, abound. Here a kind of copperas called "piedra *lipaz*" is found; also amethyst and other precious stones; and here, too, is a great plain, eighteen by one hundred and twenty miles, covered with salt almost fit for table use.

The Paray, a tributary of the Amazon through the Madeira, is navigable to Cuatro Ojos, which is thirty leagues only from Santa Cruz, the capital of the Republic.

But Lipaz is far to the south. It is of the Amazonian water-shed that I now wish to speak. Though the tributaries of the great branches of the Amazon and the La Plata, of the Madeira, the Topajos, and the Paraguay, so interlap among themselves that it is as difficult to find the "divide" between the Madeira and the Paraguay as it is to find it between the Madeira and the Topajos.

In 1772 Louis Pinto de Souza caused a vessel of considerable size to be transported from the head-waters of the Madeira to those of the La Plata, that he might thus set the example of an inland navigation. The portage between the navigable waters of the two was only two miles and a half.

It is among the upper tributaries of the Madeira that tradition of the country places the lost mines of Urucumaguan, with riches equal in value to the fabulous wealth of the gilded city of Manoa.†

On the banks of this stream are now found placers, which, using only gourds and calabashes for washers, will give the miner his two or three dollars per day.

Lakes, too, are found upon its tributaries, which yield the most abundant supplies of salt. The rivers abound in fish, and the woods with game.

Lieut. Gibbon went to Bolivia to explore the valley of the Madeira, and he is now on his way down that river. The Bolivians hailed him as a benefactor, and afforded him every facility in their power.

While he was in Cochabamba the attention of that Government was called to the subject of establishing on the

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* The *coca* is described by Castelnau as a bush which rarely attains six feet in height, and does not often exceed three. Its foliage is of a bright green, its flower white, and its fruit small and red. When the plants are about eighteen inches high they are transplanted from the seed beds into fields called *cocales*. The ripe leaves are gathered with the fingers. They are dried by spreading them in the sun, sometimes on woollen cloths. This operation requires great care, for the plant must be protected from all dampness, which changes its color, and thus diminishes its value. It is then packed in bags weighing from fifty to one hundred and fifty pounds, which are often transported to great distances. The Indians mix the coca with a small quantity of lime, and constantly carry a small bag of it in all their excursions. They take it from three to six times a day. Dr. Tschudi (Travels in Peru, page 453) mentions an Indian of sixty-two years of age who was employed by him, and though at very hard work for five days, took no other nourishment, and rested but two hours of the night. Immediately, or soon after this, he accomplished a journey of one hundred miles in two days, and said that he was ready to do the same thing again if they would give him a new supply of coca. Castelnau says he himself knew of instances as extraordinary. In the time of the Incas the coca was regarded as sacred. The importance of the coca trade, however, is diminishing as the red man disappears. From 1785 to 1789, inclusively, Castelnau represents the consumption of this leaf in the vice-royalty of Lima alone at three and a half million pounds, and worth one and a quarter million of money, and the total consumption of Peru at two and a half million dollars.

The question comes up, therefore: May not the free navigation of the Amazon introduce this valuable plant into the commerce of the world?

† Not long before Lieut. Herndon was in Peru, a party of Peruvians who had been on a gold exploration to the Amazon country returned. They had nothing but gourds to wash with, and, though they met with many untoward circumstances, they extracted seven hundred pounds of gold, and returned home with it.

navigable waters of the Madeira ports of entry to foreign commerce, and of contracting with a company to put steamers on her water-courses. The President of the Republic received the proposition in the most gracious manner.

Hence the valley of the Madeira becomes an object of special interest at this time, and I may therefore be pardoned for lingering in it so long.

Much of that country is unknown, and the stories that are told of its riches and its productions are so dazzling that we of a severe climate, accustomed as we are to a stingy soil, from which its fruits have to be wrung by long and patient labor, are disposed to receive eye-witnesses' accounts of them with some degree of allowance at least.

So far I have made my statements with regard to this subject partly upon the authority of intelligent citizens of that and the neighboring country with whom I have conversed in Peru, and partly upon the authority of M. Castelnau, a man of standing and of erudition, who was sent out by the French Government especially to examine that country, and with whom, therefore, over-coloring would be a crime; and, finally, upon the authority of officers whom also the Government of the United States has sent there for the same purpose.

As being all of a piece with the reports which these give, I quote from the letter of a friend written from Lima last summer, and which was before the publication of Castelnau's travels. Speaking of Bolivia and her enlightened President, that friend says:

"Since I last wrote to you I have made the acquaintance of Don ——, a native of Chili, and whom Gibbon saw at Chochabamba, in Bolivia. This Don is undoubtedly a clever man. He says he has come to Lima to make some arrangement concerning the monopoly of Peruvian bark. * * * * However that may be, he pretends that Belzu, the President of Bolivia, is favorably disposed towards us, and would grant privileges to a steam navigation company, were application made to him in due form. As I know of no other individual in Bolivia with whom I can communicate on the subject of Amazonian navigation, I did not hesitate to make use of him, for in my opinion there is no time to be lost, if the United States intend to secure the interior trade of South America for its citizens.

"Don —— declares that the Marmori is navigable for steamers from a point near Cochabamba to its confluence with the Guapari or Itenez, and so onward to the junction of the latter with the Beni, forming together the Rio Madeira; that the Cachulas, or falls of the Madeira, are neither impassable nor formidable, and may be easily ascended by steamers, as there is plenty of water and no rocks. To prove this, he asserts that a Brazilian schooner ascended the Marmori to Trinidad, and fired a salute at that place about two years ago. After passing the falls, the river is of course navigable to the Amazon. Admitting this statement to be true, and I am inclined to believe it, as the Brazilians constantly ascend the Itenez to Matto Grasso, there is open navigation from Para to within a few leagues of Cochabamba, at least 2,000 miles, and this is not so incredible when we consider the length of the navigation on the Missouri river. The accessibility of the Bolivian rivers will, however, be ascertained with greater certainty after Gibbon has passed through the Cacheulos of the Madeira, as it is to be hoped that he will sound, and otherwise minutely examine, the different rapids of that river and correct the errors which —— says are in the chart made by Palacios, a copy of which I sent you by Mr. O'Brien for Herndon.

"The account ——— gives of the products of the country lying on the banks of the Marmori is very glowing. He says that the richest cocoa and coffee grows almost wild, and that the greater part of the former is consumed by the monkeys and birds, for the want of means of transporting it to a market. Sugar-cane of gigantic dimensions is found every where; white and yellow cotton, of a staple equal to Sea Island. Several kinds of cascarilla grow in abundance, as also sarsaparilla and gums, ornamental and other woods, and honey and wax in immense quantities. Crossing the Marmori from Exaltacion to the southwest, you arrive at the river Machuno, which, according to ———, is a small Pactoters; and he assures me that the whole country between the Marmori and the Itenez, from latitude 14° to the north, is a gold district as rich as California. *My* opinion decidedly is, that the whole country traversed by the rivers opening, from the slope of the Eastern Cordilleras, from Santa Cruz de la Tierra, in Bolivia, to the mouth of the Ucayali, in Peru, is one immense gold and silver region, gold being found in the flats near the rivers and silver in the mountains. I will venture to predict that the same region contains diamonds and other precious stones, and probably some unknown to the lapidary at present.

"The silver mines of Carabaya were immensely productive when worked by Salcedo; so much so, that the Vice Regal Government trumped up an accusation against him, tried, and ordered his execution, to obtain possession of the mines by confiscation. The attempt failed, as the Indians, who were devoted to Salcedo, refused to give any information to the Government respecting the mines, and they have remained unworked up to the present time. Gold is known to exist in considerable quantities at Carabaya, and in the Pampa del Sacramento. I have seen specimens from the former place. But gold is the least attraction for emigration to Bolivia; the soil and its products are the source from which the wanderers from foreign lands are to find plenty and happiness. The climate is said to be good, and the Indians, except on the lower part of the Beni, peaceable and well disposed to the whites. In short, according to ———, the east of Bolivia affords the greatest sphere for trade and colonization.

"Without, however, placing implicit credence on what ——— states, I determined to avail myself of the influence he undoubtedly possesses with President Belzu to forward, as far as possible, our plan of opening the navigation of the Amazon, and to prevent as much as I could the success of the Brazilian policy of exclusion. Having ascertained from ——— that 'Guarazos,' a village of four hundred inhabitants, situated at the junction of the Marmori with the Itenez, on the Bolivian side, and 'Exaltacion,' a town of four thousand inhabitants, were the principal places on the Marmori below the town of Trinidad, I proposed to him to write to Belzu and induce him to declare those places ports of entry for foreign commerce. He caught at the idea at once, and said it was '*mus luminosa*,' and wrote to the President by the last post upon the subject. He says that Belzu has declared that he will make no concessions to the Brazilians; that the *Norte Americanos* are the people for him, as they will bring wealth, force, and civilization to Bolivia.

"I cannot doubt that the Bolivian Government will declare the places mentioned above, viz. Guarazos and Exaltacion, ports of entry to foreign commerce. In that event there will be one great point gained. It will show that Bolivia wishes to open commercial relations with us; therefore, we can insist that Brazil shall not throw any impediment in the way of our trade with that Republic. Unfortunately, we, as individuals, have neither the power nor the means of carrying out this gigantic, this magnificent plan of opening the finest and most extensive region of the globe to population and civilization. We have gone on so far unaided by the counsel, or even the countenance of the General Government, with the exception of ——. For myself, I feel full of this vast subject, for I know that within less than one hundred leagues of me is the margin of those great solitudes, replete with riches and occupying the wild space where millions of the human race might dwell in plenty and happiness; where nature annually wastes more than would support the population of China in comfort; and where the most luscious fruits and fairest flowers grow and bloom unknown and unnoticed. When I reflect on this, and on the miles of rivers rolling on in silence and neglect, I feel doubly the want of power and money to accomplish their introduction to the civilized world.

"To return to the question of internal navigation in South America, enclosed you will find a slip from the 'Commercio' newspaper published in this city, containing an account of the departure of a small expedition from Paucatambo to explore the river Madre de Dios.

"The Cuzcanians are alive to the importance of communicating through their rivers to the Amazon and the Atlantic ocean, and whenever the question shall be fairly brought before the Peruvian Government, and it is ascertained that the United States intend to force open the way through the Brazils, I can count upon the assistance and influence of the whole Department of Cuzco, and probably of the whole number of Senators and Deputies from the Eastern provinces of the Republic. Until some action shall be taken by the Government of the United States, little can be done here.

"However, *en attendant*, it would be well if you were to attempt to organize a company for the navigation of the South American rivers *generally*, because, whilst we look at the Amazon, we should not lose sight of the La

Plata. The country lying upon the head-waters of that river is better populated than that on the confluents of the Amazon; and, from all I can learn, the commerce with Paraguay alone would amply repay the outlay necessary to establish a steam company for the waters of the La Plata. Possibly if steamers were actually plying upon the Paraguay and Parana, the Brazillian Government might be better disposed towards us, and the question of Amazonian navigation be amicably settled. You may rest assured that if the United States do not move shortly in the matter, some other nation will.

"Even the Bolivians themselves are beginning to wake up to the importance of opening a communication with the Atlantic. The subject is touched upon in the enclosed articles from the 'Commercio,' published in this city. The Bahia Negra is not put down on the map I have, nor on Guturriez, the lake Izozos, the river Otugues, nor the Lative-qui-que, but it appears to me that a better and more direct route to the Paraguay, from Chuquisaca, (Sucre,) would be down the Philcomayo, which passes within a few leagues of the town. I am not aware whether that river is navigable, nor whether the country it flows through is at all productive. I presume not, as it traverses the Gran Chaco desert.

"I think that the energies and influence of all the friends of South American internal navigation and civilization should be directed towards forming a company with a large capital, and to obtain the aid and support of the Congress of the United States. I know how difficult an undertaking it is to wring an appropriation out of our National Legislature for any purpose, but if the subject could be fairly brought before it, and some of the leading Senators and Representatives could be excited to take a patriotic interest in it, perhaps something might be done."

"We must on our side do all we can, and, by dint of perseverance, we may succeed at last in accomplishing our object. Should we do so, it will be a proud satisfaction to ourselves, though the public may, and probably will, leave us to exclaim, '*Hos ego versiculos feci tulit alter honores.*'

"I shall continue working on and writing to you whenever I have any thing of the least interest to communicate."

I think that from this showing I am entitled to say that commerce up and down the Amazon now with Bolivia is not an abstraction.

Just as I am concluding this number, I received a communication from South America, stating that in all probability Bolivia will make, in the month of December, 1852, Exaltacion on the Madeira, and Rezes on the Beni, both belonging to the Amazonian water-shed and to the tributaries of the Madeira, *free ports to the commerce of the world;* and that the sum of $10,000 will be offered as a reward to the first steamer that shall arrive at either one of these places.

The results of Lieut. Gibbons exploration of these water-courses are, moreover, looked for, it is said, with exceeding interest by the Bolivians. INCA.

NATIONAL INTELLIGENCER.

THE AMAZON AND THE ATLANTIC SLOPES OF SOUTH AMERICA.—No. V.

About one-half of Bolivia, two-thirds of Peru, three-fourths of Ecuador, and one-half of New Granada are drained by the Amazon and its tributaries. For the want of steamboat navigation on these water-courses the trade of all these parts of those countries goes west by caravans of mules to the Pacific. There it is shipped, and, after doubling Cape Horn and sailing eight or ten thousand miles, it is then only off the mouth of the Amazon on its way to the United States or Europe; whereas, if the navigation of the Amazon were free to these countries, the steamers on that river would land their produce at the mouth of the Amazon for what it costs to convey it across the Andes on mules to the Pacific.

A question, therefore, of the greatest importance to these republics is the free navigation of that river. The introduction of the steamboat upon their tributaries of it would be followed by the immigrant up the Amazon, who would soon make a perfect garden-spot of the splendid provinces that are on its banks.

The distance between the sources of the Amazon, in Peru, and her Pacific coast is, at the nearest point, not more than sixty or seventy miles.

The province of Caxamarca, which is upon the Amazonian water-shed in Peru, has a population of 70,000. It is said to be the healthiest part of the world. In 1792 there were eight persons in it whose respective ages were 114, 117, 121, 131, 132, 141, and 147; and one person died there at the age of 144 years, 7 months, and 5 days, leaving 800 living descendants.* The city of Caxamarca is in 7° south.

There are upon this water-shed, in Bolivia, the cities of Chuquisaca, Cochabamba, and Santa Cruz; in Peru, the famous city of Cuzco, Huancavelica, (celebrated for the richest quicksilver mines in the world,) Tarma, Caxamarca, and Moyabamba; and in Ecuador, the celebrated city of Quito, besides numerous other towns, villages, and hamlets in them all.

The revolution which the discovery of the passage around the Cape of Good Hope made in the trade of the East was not greater than that which the free navigation of the Amazon would make in the trade of these four republics. It would make of them new countries and a new people. Total population at present estimated between seven and eight millions.

In May, 1851, Lieut. Herndon set out from Lima, on his way to explore the Amazon; and it is through him that I derive most of my information concerning the Peruvian water-shed of that river.

I therefore introduce the reader upon that water-shed by an extract from his journal, which he has kindly permitted me to make. Standing in view of three beautiful lakes—one of them, Morococha, or "Painted Lake," being that from which the head-waters of the Amazon flow—he remarks:

"Though not yet sixty miles from the sea, we had crossed the great 'divide' which separates the waters of the Pacific from the waters of the Atlantic. The last steps of our mules had made a striking change in our geographical relations—so suddenly and so quickly had we been cut off from all connexion with the Pacific, and placed upon waters that rippled and sparkled joyously as they danced by our feet on their way to join the glad waves of the dark blue ocean that washes the shores of our own dear land. They whispered to me of home, and my heart went along with them. I thought of Maury, with his researches concerning the currents of the sea; and, recollecting the close physical connexion pointed out by him as existing between these the waters of the Amazon and those of our own majestic Mississippi, I musingly dropped a bit of green moss plucked from the hill-side upon the bosom of the placid Morococha, and as it floated along I followed it, in imagination, down through the luxurious climes, the beautiful skies, and enchanting scenery of the tropics, to the mouth of the great river that this little lake was feeding; thence across the Caribbean sea, through the Yucatan pass into the Gulf of Mexico; thence along the Gulf Stream, and so out upon the ocean off the shores of our own 'land of flowers.' Here I fancied it might meet with silent little messengers cast by the hands of sympathizing friends and countrymen high upon the head-waters of the Mississippi, or away in the Far West, upon the distant fountains of the Missouri.

"It was indeed but a bit of moss that was floating upon the water while I mused. But fancy, awakened and stimulated by surrounding circumstances, had already converted it into a skiff manned by fairies, and bound upon a mission of high import, bearing messages of peace and good will, and telling of commerce and navigation, of settlement and civilization, of religious and political liberty, from the 'King of Rivers' to the 'Father of Waters,' and possibly meeting in the Florida pass, and speaking through a trumpet louder than the tempest, with sprites sent down by the naiads of Lake Itasca with greetings to Morococha.

"I was now for the first time fairly in the field of my operations.

"I had been sent to explore the valley of the Amazon, to sound its streams, and to report as to their navigability. I was commanded to examine its fields, its forests, and its rivers, that I might gauge their capabilities, active and dormant, for trade and commerce with the States of christendom, and make known to the spirit and enterprise of the age the resources which lie in concealment there, waiting for the touch of civilization and the breath of the steam engine to give them animation, life, and palpable existence.

"Before us lay this immense field, dressed in the robes of everlasting summer, and embracing an area of thousands upon thousands of square miles, on which the foot-fall of civilized man had never been heard. Behind us towered, in forbidding grandeur, the crests and peaked summits of the Andes, clad in the garb of eternal winter.

"The contrast was striking and the field inviting. But who were the laborers? Gibbon and I. We were all. The rest were not even gleaners. But it was well. The expedition had been planned and arranged at home with admirable judgment and consummate sagacity; for had it been on a grand scale, commensurate with its importance, or even larger than it was, it would have broken down with its own weight.

"Though the waters where I stood were bound on their way to meet the streams of our nothern hemisphere, and to bring, for all the practical purposes of commerce and navigation, the mouth of the Amazon and the mouth of the Mississippi into one, and place it before our own doors; yet from the head of navigation on one stream to the head of navigation on the other the distance to be sailed could not be less than ten thousand miles.

"Vast, many, and great, doubtless, are the varieties of climates, soils, and productions within such a range. The importance to the world of settlement, cultivation, and commerce in the valley of the Amazon cannot be overestimated. With the climates of India, and of all the habitable portions of the earth, piled one above the other in quick succession, tillage and good husbandry here would transfer the productions of the East to this magnificent river-basin, and place them within a few days' easy sail of Europe and the United States.

"Only a few miles back we had first entered the famous mining districts of Peru. A large portion of the silver which constitutes the circulation of the world was dug from the range of mountains upon which we were standing, and most of it came from that slope of them which is drained off into the Amazon. Is it possible for commerce and navigation up and down this majestic water-course and its beautiful tributaries to turn back this stream of silver from its western course to the Pacific, and conduct it, with steamers, down the Amazon, to the United States, there to balance the stream of gold with which we are likely to be flooded from California and Australia?

"Questions which I could not answer, and reflections which I could not keep back, crowded upon me. Oppressed with their weight and the magnitude of the task before me, I turned slowly and sadly away, secretly lamenting my own want of ability for this great undertaking, and sincerely regretting that the duty before me had not been assigned to abler and better hands."

The Amazon, in Peru, is called the Maranon. It takes its rise in about 11 deg. south, and flows N.N.W. for about five hundred miles; thence turning east, and constituting, according to the maps, (but the maps are wrong,) the boundary line between Peru and Ecuador for about eight hundred miles by its windings. Crossing in Peru the head-waters of the main stream, Lieut. Herndon reached the banks of the Huallaga, a noble tributary, and embarked upon it at Tingo-Maria. He descended it to its junction with the main stream, and thence to the mouth of the latter by a river navigation of not less than three thousand five hundred miles.

At Tarapoto he fell in with a clever New England blacksmith, who had been in that country for many years, and from whose valuable notes concerning the com-

* Montgomery Martin.

mercial resources of the places visited by him I derive the following:

Tarapoto, situated on the left bank of the Huallaga, six leagues above Chasuta, the head of uninterrupted navigation from the sea, is one hundred and thirty leagues from the city of Huanuco, and twenty-four from Moyabamba. Climate very healthy, and free from all annoying insects.

It is situated on a beautiful plain of from twenty to twenty-five leagues in circumference, which is intersected by many rivulets. The soil is fertile, producing in great abundance cotton, coffee, sugar, indigo, and cocoa, as well as every thing else to which the climate is adapted. Here the plaintain continues, without any other care than that required to remove the noxious weeds, to produce in full vigor from fifty to sixty years. Cotton gives a crop in six months from the seed; rice in five months; and indigo grows wild. Neat cattle and sheep thrive here and multiply most rapidly. Population of the town and its two ports in 1848, 5,350: annual births about 235; deaths, 40. Principal branch of industry cotton cloth, of which they manufacture between thirty-five and forty thousand yards. It is made by hand, and one yard of our common coarse cotton is worth there two of that.

The currency is white wax and this coarse cotton stuff of the country, which in Chachapoyas is worth twelve cents the yard.

One pound of white wax is worth four yards of cotton; a good-sized bull, one hundred yards; a well-grown fat hog, sixty yards; a big sheep, twelve yards; twenty-five pounds of coffee, six yards; twenty-five pounds of rum, twelve yards; a laying hen, four ounces of wax; a chicken, two ounces; twenty-five pounds of rice in the husk, a half pound of wax; twenty-five pounds of corn, two ounces; twenty-five pounds beans, four ounces; a basket of yucas, weighing from fifty to sixty pounds, two ounces; twenty-five pounds seed cotton, eight ounces; a bunch of plaintains, weighing from forty to fifty pounds, *three* needles. Storax, cinnamon, milk of trees, gums, and other products of the forests have no fixed value; but they may be had in quantity from the Indians at merely nominal prices.

The land transportation from Tarapoto to Moyabamba, with its population of 15,000, is done on the backs of Indians. Seventy-five pounds make a load, and the freight is six yards of cotton, valued at three yards of our common "fi'penny bit" stuff.

The pay of a common laborer is four ounces of wax per day and found, "with *chica* at discretion."

This is the most important town in the province of Mainas, on account of its proximity to navigable waters and its connexion with such a large extent of territory that is not liable to overflow.

From Tarapoto to Chasuta you pass the villages of Quan Guerra and Shapaja. Chasuta is at the head of uninterrupted navigation on the Huallaga. Lieutenant Herndon, coming down at low water, met between this place and the mouth of the Amazon with nowhere less than five feet of water. The high-water mark is forty feet above the stage in which the river was when he was there. From Chasuta to the mouth of the Amazon the distance by water is upwards of 3,000 miles; and for half the year the Pennsylvania, seventy-four, would find water enough to reach that village from the sea.

Population of Chasuta 1,031; distance to Tarapoto by land six leagues; cost of transportation, one pound of wax the Indian load, one pound of wax being equivalent to four yards of cotton. Cows, sheep, horses, and hogs thrive well. Productions those of Tarapoto.

Yunimaguas, twenty-four leagues below Chasuta; population 319; country fertile. A good road can be cut from this place almost *in a straight line* to Moyamtama, distance thirty leagues.

Santa Cruz is thirty-five leagues below Chasuta. Here white wax is worth one and a third yards cotton, and five pounds wax are sold for one white-handled knife. Population 300.

Chamicuros, thirty-nine leagues below Chasuta, with a population of 331. Valuable resins and gums abound in the woods.

Laguna, forty-four leagues below Chasuta, and four above the mouth of the Huallaga, has a population of 742, and a fertile soil.

Urarinas, on the Amazon, five leagues below the mouth of the Huallaga—population forty-three. This is an important place on account of the immense quantities in its vicinity of the tree which produces the gum-copal.

Passing by the villages of Parinari and San Regis, we come to Nauta, the capital of the district. It is situated on the right bank of the Amazon, forty-six leagues below the mouth of the Huallaga, and ninety-four below the head of uninterrupted navigation on that river.

It is to this place that Brazil, by treaty with Peru, has just contracted for a line of steamers, under the Brazilian flag, from Para, at the mouth of the Amazon. This line is to have a monopoly of steamboat navigation on the Amazon for thirty years, with a bonus of $100,000 per annum for the first fifteen.

It therefore becomes a place of importance; and as I shall have occasion to allude to it again in connexion with this steamboat line, under the Brazilian flag, I will here take no more notice of it.

Nauta is also only half a league above the mouth of the Ucayali, another tributary of the Amazon, and larger than the Huallaga—population 810.

Here one yard of English or American cotton is worth two and two-thirds yards of the cotton cloth of the country; and thirty-four pounds of sarsaparilla are given for eight yards of the latter; a full-grown hen is worth six needles; a chicken three; and fifty or sixty pounds of yucas six. A Portuguese merchant has established a house here.

Amaguas, seven miles below Nauta, is an important point, (though at present it has but 240 inhabitants,) on account of its great extent of fertile lands.

Passing Amaguas with its 240 inhabitants, Iquitos with its 127, and Arau with its eighty, we arrive, twenty-seven leagues below the mouth of the Ucayali which comes from the south, at the mouth of the Rio Napo, a tributary from Ecuador. There is here a settlement consisting of one family of Mitos Indians and one fugitive slave from Brazil—total thirty-one.

This river is 200 yards broad at its mouth, and is navigable for 300 miles. It is rich in gold; its banks are inhabited by hostile tribes of Indians, and covered with sarsaparilla and other valuable products of the forests. These Indians make the finest and most beautiful hammocks that are found in the Pampa del Sacramento; price of a hammock two yards of cotton. The trade in poisons makes this an important place.

Pebas is thirteen leagues below the mouth of the Napo; has a population of 387, and a fine country round about. Its productions are white and black wax, sarsaparilla, vanilla, poisons, storax, "chambira," hammocks, pitch, copal, incense, India rubber, milk of the cow tree, and many curiosities, which the Indians, who, though wild and savage, are friendly to the white man, usually bring in exchange for beads, trinkets, &c.

White wax is worth two yards of cotton; black, one and a half; thirty-four pounds sarsparilla, twenty-four yards; hammock, two yards; a little pot of poison, four yards; one pound vanilla, eight yards.

Thence to Loreto, the frontier town of Peru, we have five small villages. Loreto is 160 leagues below the head of uninterrupted navigation of the Huallaga: population, 122. In this village you find a preparation from the wild yuca, which is very palatable, wholesome, and nutricious. It is a good substitute for bread.

Sarayacu, situated on the right bank of the Ucayali, 300 miles above its junction with the Amazon, has a population of 1,270.

This is an important point, in the midst of a fertile region. Eight or ten miles above this town the Ucayali receives the Ahuaytia, which takes its rise almost on the banks of the Huallaga. A few miles up this tributary bring you to a great sarsaparilla country. This drug costs here eight yards of the cotton cloth of the country the 100 pounds; which 100 pounds are worth $25 in Para, and from $40 to $60 in Europe, according to the markets. These eight yards of cotton for the 100 pounds of sarsaparilla, according to the statement of this clever blacksmith, are worth four yards only of our coarse cotton.

Let us therefore, for the sake of illustration, trace this trade through its entire course.

The American or English peddler to the Amazon—for trader he is not—buys in New York or Liverpool, as the case may be, four yards of cotton, for which he pays twenty-five cents. He ships thence around Cape Horn to Callao. Here it pays duty at the Peruvian custom-house, and is sent thence to Lima by mule. By this time, what with freight, transportation, and commissions, it has cost the purchaser fifty cents. It is then packed on mules, carried across the Andes, and in about twelve months from the time of its leaving New York or Liverpool it arrives at the mouth of the Ucayali, where it is sent up by boat, which occupies three hundred working hours in going up three hundred miles to Sarayacu and the sarsaparilla country. Here this piece of four yards is exchanged in barter, according to Hacket, the New England mechanic, from whom I have been quoting, for 100 pounds of that drug. A shipment of the return cargo is then made in the rude river raft of the country, and this 100 pounds of sarsaparilla, bought with four yards of "fi'-penny-bit" cotton, when it reaches the Amazon is worth $9 in Nauta, $10.50 in Sabatinga, $25 at Para, and $50 at New York or Liverpool. The voyage has been a long and a tedious and a round-about one, but the profits are enormous.

Now, if Peru and Brazil, instead of forcing commerce with their interior provinces to go around "Robin Hood's bow" to get there, would open ports of entry to all nations, and permit them to use the navigation of the Amazon, the citizens and subjects of Peru and Brazil, instead of getting four yards of cotton for their one hundred pounds of sarsaparilla, would get three or four hundred yards for it.

It would be difficult to quote any example more strikingly illustrative of the advantages to Peru of that "policy of commerce" which calls for the establishment of a port of entry at the head of navigation on the Maranon, as the main trunk of the Amazon is here called; at Chasuta, the head of navigation on the Huallaga; at the head of navigation on the Ucayali; and at Nauta, which is at the junction of this last with the Amazon.

So Ecuador might establish ports of entry on her side of the Amazon, at Barja, if the navigation be uninterrupted that far, and if Barja belong to her; and at the head of navigation at each one of her Amazonian tributaries, as the Pastaza, the Napo, the Putomayo, and the Japura; though the head of navigation of the last is perhaps in New Granada.

Now, if one of these republics should declare such places free ports to all the world, or ports of entry to the commerce of all nations at peace with them, surely Brazil would not in this enlightened day, if an American or an Englishman should wish to wear his own flag and go up in his own bottom under it on a trading voyage to those ports—surely, I say, Brazil would not at this day attempt to play the part of Japan, and hinder those vessels from passing by her doors to other parts of the world.

The Pastoza, I am informed on the authority of my old Friend, General Villamil, the Secretary of State of Ecuador, is navigable nearly up to Quito; and it is well known that the Sands of most of those streams are auriferous.

Tabatinga is the frontier post of Brazil on the Amazon. Thence ascending, we have an uninterrupted navigation along the main trunk of the Amazon, which here courses through the northern parts of Peru, and not far from the southern boundary of Ecuador, for the distance of five or six hundred miles. Thus a steamboat may reach the foot of the Andes.

Lieut. Herndon entered the Amazon four hundred and sixty miles above the Brazilian boundary, and he thus describes the river there:

"The Amazon, where it receives the Huallaga, is five hundred yards broad. The march of this great river in its silent grandeur was sublime; but in the untamed might of its turbid waters, as they cut away its banks, tore down the gigantic denizens of the forests and built up islands, it was awful. It rolled through the wilderness with a stately and solemn air; its waters looked angry, sullen, and relentless, and the whole scene awoke emotions of awe and dread, such as are caused by the funeral solemnities, the minute gun, the howl of the wind, and the angry tossings of the waves, when all hands are called 'to bury the dead' in a troubled sea.

"Though the river was not at its full, it reminded me of our Mississippi at its topmost floods. The waters are quite as muddy and quite as turbid, but the Amazon lacked the charm and the fascination which the plantation upon the bank, the city upon the bluff, and the steamboat upon the water lend to its fellow of the North; nevertheless, I felt pleasure at its sight. I had already travelled seven hundred miles by water, and fancied that this powerful stream would soon carry me to the ocean. But the water travel was comparatively just begun; many a weary month was to elapse ere I should again look upon the familiar face of the sea, and many a time, when, worn awearied with the canoe life, did I exclaim, 'this river seems interminable.'

"Its capacities for trade and commerce are inconceivably great. Its industrial future is the most dazzling, and to the touch of steam, settlement, and cultivation, this rolling stream and its magnificent water-shed would start up into a display of industrial results that would make the valley of the Amazon one of the most enchanting regions on the face of the earth.

"From its mountains you may dig silver, iron, coal, copper, quicksilver, zinc, and tin; from the sands of its tributaries you may wash gold, diamonds, and precious stones; from its forests you may gather drugs of virtues the most rare, spices of aroma the most exquisite, gums and resins of the most useful properties, dyes of hues the most brilliant, with cabinet and building woods of the finest polish and most enduring texture. Its climate is an everlasting summer, and its harvest perennial."

With this enchanting picture, and the hope that Lieut. Herndon will soon let us have in full the report of his wonderful voyage down the Amazon, I close this the antepenultimate of my numbers. INCA.

NATIONAL INTELLIGENCER.

THE AMAZON AND THE ATLANTIC SLOPES OF SOUTH AMERICA.—No. VI.

The Amazon enters the Atlantic through a delta. The principal tributaries from the south which fall into this river are, commencing at its mouth and going up, the Tocantins, the Chingu, the Tapajos, the Madeira, the Purus, the Tappé, the Hyuruba, the Hintay, the Tavary, the Ucayali, and the Huallaga—none of them smaller than the Ohio, and some larger than the Missouri.

From the north come the Rio Negro and the Japura, (two mighty streams,) the Putomayo, the Napo, the Tigré-Yacu, and the Pastaza.

I have spoken of the present commercial resources of the Madeira and the Huallaga from information derived from Lieutenants Herndon and Gibbon, United States navy, and from M. Castelnau. As to the present condition of the trade and resources of these other rivers, except the Tocantins, we are left very much in the dark or to conjecture.

All of them, we know, have falls and rapids of more or less velocity, which offer obstructions more or less difficult to steamboat navigation. Therefore, as to the question of how far these rivers may be ascended by steamboats at low water, and how far at high, that must be left for actual trial to decide. I hope, therefore, the time is not distant when an American steamer will be sent to make a complete and thorough examination as to this point, and to explore that rich and interesting region of country with a view to its commercial resources, both present and prospective.

In the present state of our information, we can judge of the actual resources of these several streams for trade and traffic by comparing those as to which we are in the dark with those which have been recently explored. As the type of the whole in this respect, therefore, I take the Tocantins.

As you enter the southern mouth of the Amazon, the mouth of the Tocantins is the first but one that you pass. It traverses more parallels of latitude than our Mississippi does. But it is a straighter, and therefore not so long a river. It takes its rise in the provinces of Matto Grosso and Goyaz, and drains these two provinces, with that of Para. This river lies wholly within Brazilian territory, and was explored down to port Barra by Castelnau in 1843–4. From him, therefore, I derive my special information with regard to it.

It drains a gold and diamond country, and is an exceedingly rich agricultural one. Its principal tributary is the Araguay, which is a most noble stream. Speaking of parts of the valley of the Tocantins in which he was, Castelnau says: "I believe that this rich and valuable country will be found one of the most healthy in the world."

The city of Goyaz, with a population of seven or eight thousand, and the capital of its province, its situated on Vermilho, celebrated for its golden sands. This river is about twenty steps wide opposite the city, and vessels from Para come up and make fast to the bridge below. The distance thence in a straight line to the mouth of the Amazon is rather under than over a thousand miles. The population of the whole province, more than two-thirds of which is in the valley of the Tocantins, is 125,000, of which 25,000 are slaves.

There are a number of flourishing towns and villages on the water-shed of this river. Among these is Salinas, which derives its name from its salt-works.

Near by the salt lake of Salinas is the Lake of Pearls, surrounded by a beautiful vegetation, and numerously inhabited by aquatic birds. Nothing, says Castelnau, can give one "*une idée de la beauté de cette jolie pièce d'eau.*" Its waters are fresh, and it abounds with a shellfish which contains the pearl.

It was here that the *voyageurs* found such a variety of rare and useful plants: among them one the fruit of which is used to make ink, and it is an excellent substitute for nut-galls; another was a kind of cane, the roots of which make a yellow die of the most exquisite hue. They obtained wild from the forest all the colors with which they painted the Brazilian flag that was hoisted during the descent of the Araguay, the principal tributary of the Tocantins, and far more beautiful than the *belle rivière* of the *West*.

They use for tanning the bark of a tree, with which the raw hide is converted into leather in a month. They have two varieties of manioc, of great beauty, which require little or no labor in cultivation. It is propagated by cuttings, or slips; so also is the sugar-cane, which sends up from every joint a dozen stalks, and gives a crop in every eight months. The black bean, an essential article of food with the Brazilians, grows here in great perfection; it yields four crops a year. Two kinds of beautiful palms grow wild in the woods, which also furnish the natives with an abundant supply of wholesome food.

There have been in this province as many as one hundred thousand slaves employed at one time in collecting gold alone.

But, as rich in mines as this province is, its soil with its productions is much richer. It is well adapted to the cultivation of cotton and coffee, sugar and tobacco, of Indian corn, rye, wheat, and oats; of rice, indigo, pulse, and potatoes; manioc, nuts, ipecacuanha, sarsaparilla, vanilla, anatto, balsam, India rubber, and a great variety of gums, spices, ornamental woods, roots, drugs, and dye-stuffs.

The margins of the rivers afford pasturage and support to numerous herds of cattle and horses. Their waters abound in fish. Castelnau saw dolphins sporting in them.

Limestone and saltpetre caves, with salt lakes, add beauty to the country and variety to its resources; also, iron mines abound.

The mode of cultivation is rude and ruinous. The planters scratch the earth with a pick, sow, and at the end of a few months, says Castelnau, reap one or two hundredfold, more or less, according to the fertility of the soil and the excellence of the season.

The ordinary prices are: for coffee, 3¾ cents the pound; seed cotton, 1 cent the pound; white sugar, 3 cents; tobacco, 4 cents; beef cattle, $2 to $3 the head; tanned hides, 65 cents apiece; green ditto, 20 cents.

The exports consist of these, besides calf, kid, otter, and ounce skins, with other products of the field, the forest, the river, and the mine.

The imports are fabrics of silk, wool, flax, and cotton, hats, salt, drugs, medicines, crockery, wine, brandies, farming implements, &c.

The voyage up the river from Para occupies about five months. The upward freight is four dollars the one hundred pounds; the downward, one dollar; and the first steamer has yet to be seen upon this majestic stream.

Here, then, is a river which enters the Amazon so near the sea that the water at its mouth is salt, and Brazil has not had the energy to put the first steamboat upon it. How, then, is it possible for her to travel three thousand miles up the mighty Amazon, and introduce the steamer upon the waters of Peru, as she has endeavored to persuade the Government of Peru that she can?

The crew of one of those rude vessels that go poling up the Tocantins as far as Porto Imperial consists of from twenty to thirty men. They take down, among other things, hides, which at Goyaz are worth fifty cents, and at Para sell for one dollar and fifty cents; and so of other things.

The banks of this river are said to be inhabited in some part by hostile Indians; and this, it is said, is one of the causes of its rude navigation. But the steamboat would certainly not have more to fear than these unwieldy hulks of Brazil, as they go creeping along the coward shores.

There is a dozen other rivers emptying into the Amazon that drain water-sheds, which are no doubt as rich and as fertile as this.

We are entitled to infer, not only by reference to the Tocantins as a type of them, but by reference to the quantity of produce that goes to sea from the Amazon, that the valleys of its other tributaries are not behind that of the Tocantins. Produce enough comes down the Amazon to Para to give that city an annual trade of three millions of dollars!

Bolivia sent last year from her part of this great watershed two million dollars' worth of Peruvian bark alone. But that went over the mountains to the Pacific. The steamboat would have brought it down the Amazon to the Atlantic. It would have brought business to Para, and added greatly to the wealth of Brazil and the prosperity of her people.

It certainly would be wisdom in Brazil were she to make not only the navigation of the Amazon free to all the world, but it would be politic to throw open to foreign commerce and navigation the Tocantins also, and all her other Amazonian tributaries.

The value of the trade up and down the Tocantins would be increased manyfold; the hostile Indians, which infest its banks and prevent their settlement, would be driven away; and lands that are now profitless, and produce that is valueless, would become profitable.

We admit the coffee of Brazil into our ports duty free. We are her best customer and friend, and it is quite time that Brazil had signalized her appreciation of this patronage and friendship by some sign or token at least that she too would be liberal in her policy.

Since the subjects of Brazil themselves have not judged it expedient to put a steamer on the Tocantins to go up after all this coffee, and rice, and sugar, and tobacco, &c., it certainly would be wise in her to permit citizens of the United States, or of France, or of England, to do it. They would gladly go up this river after this fine Goyaz coffee. Her subjects then would receive double the price they now receive for it, and the rest of their produce. Those of them who are employed in transporting this merchandise to the sea-board by water and by land would then find more profitable employment in the cultivation of the soil. Double the price of the staples of a country, and you not only double the price of labor, but you greatly enhance the national wealth. Increase the substance of the subject, and you increase his power to pay taxes; and this, I imagine, is what Brazil wants.

But this river Tocantins lies wholly within Brazilian territory; she has the right to open it to the commerce of the world or not, as she pleases; and her action with regard to it is no just cause of complaint or offence to any nation.

Not so, however, when she keeps closed the Amazon, and endeavors, because she holds the mouth of that river, to shut it up, and to cut off those five Spanish-American republics which own navigable tributaries to it, from commerce with the world, and all the world from commerce with them.

There are physical agencies at work upon the great Atlantic slopes of South America which will for ages prevent its inhabitants from becoming a seafaring people. The laws of Nature have ordained that the people who dwell upon those slopes shall be tillers of the earth or keepers of flocks and herds. That wise Law-giver never intended that men should forsake a land of milk and honey for the mariner's toiling, where, after toil, hardship, danger, and exposure, he can only gain the means of a frugal subsistence from the sea.

Bread grows on trees in Brazil; honey is found in the woods; and there is a tree there, too, which, being tapped, yields abundantly a rich juice which the people use instead of milk. Nature has never yet put it into the heart of man to forsake such a land and take to the sea.

The sea-front of these beautiful slopes proclaims this same law of Nature. It is written in the fields, whispered in the breeze, and felt in the climate.

The sea has no spell by which the enchantments of soft climates, fertile soils, cheap lands, and a healthy country can be broken. It is necessity—and that, too, a necessity that is right stern—which induces a man to forsake the land and take to the sea for a living.

Among the conditions requisite to make the people of any country a seafaring people are peculiarities of soil and climate, which make it easier for the workingman to earn his bread at sea than it is on the land. These peculiarities do not exist in Brazil, and Brazil has no seamen. Only look whence the sailors come that now do the fetching and carrying across the seas. They come from the severe climates of the extra-tropical regions of the north, and not from the sunny climes of the south. They come from Old and New England, the north of Europe and of America. Who ever heard of our western people who live in the Mississippi valley sending out their sons before the mast to make sailors of?

It is too easy there to earn a living out of the soil. Much easier is it in the valley of the Amazon, where the plantain and the banana, the most nutritious of food, grow and ripen, and are prepared for the table, without even the care of the laborer to dress the plant or the viand; where rice grows wild, the sugar-cane ripens every eight months, and where food enough to support a population of millions is annually wasted for the want of laborers to gather it. How can the people of such a country ever become a seafaring people? What, short of the messengers of God's wrath, the famine and the pestilence, could drive a people from such a land, or induce them to forsake it and follow the sea?

Another condition necessary to the establishment of seafaring communities is the presence of the sea.

Contrast the rock-bound coast of South America—its stiff outlines, its want of articulation; the rigid, forbidding sea-front of its Atlantic slopes, with the waving seashores, their magnificent gulfs, their beautiful bays and harbors, with their capes, promontories, and peninsulas, of the northern maritime regions of the earth, and see how forcibly Nature has proclaimed the fact that the soil and the climate of Brazil forbid her people to follow the sea. When the dry land first appeared it was ordained that a Power of maritime habits was never to dwell where Brazil is.

Look at the Baltic sea, the Mediterranean, and the Black, which, with their arms and gulfs, stretch up into the heart of Europe, and by their presence invite the people to leave those over-populated districts and inhospitable climes to roam over the sea, and visit the sunny spots of the earth.

Again, look in like manner in the northern hemisphere, at the Red Sea, the Persian Gulf, jutting out Hindoston, tipped with the pendant isle of Ceylon, the bay of Bengal, the Straits of Malacca, the gulfs of Siam and Tonquin; the Yellow Sea, with the seas of Japan and Oktsk, winding along the shores, insinuating themselves among the people far back in the country, and with a coast-line wonderfully indented, inviting them out to sea—consider this, and then contrast this shore-line of the North with the shore-lines of Africa and New Holland. There is no articulation there, and Nature never intended either of these two continents as the home of a maritime and seafaring people.

The same contrast holds between the bays, gulfs, bights, and peninsulas of North America, when you come to compare them with the straight lines which in South America divide the dry land from the sea. Nature, therefore, is against Brazil with her longings for maritime consequence. She must be content to let other nations fetch and carry for her. She can never have the shipping nor the men to carry her own produce to market. They have something better to do.

All of Europe, some of Asia, half of Africa, most of North America, and ninety and nine parts of South America, are drained into the Atlantic. The three largest rivers in the world empty into it, and the largest of river-basins are tributary to it.

It is but as a narrow canal which separates Europe and Africa from the New World, and the amount of back country which through river-basins and Atlantic slopes is tributary to this oceanic canal must forever send down to it an immense amount of produce and merchandise. The Atlantic ocean is therefore destined to be forever the great scene of this world's business and of commerce. And the principal feature in this arrangement of land and war, and distribution of river-basin and sea highways, is the valley of the Amazon.

The winds and currents of the sea are so ordered that, wherever the market-place may be, every sailing vessel, as she passes to and fro between it and the mouth of the Amazon, must, either in coming or in going, pass by our doors.

The Atlantic seaports are the half-way stations between the mouth of the Amazon and all the markets of the earth. The trade winds and the great equatorial current of the Atlantic have placed the commercial mouth of the Amazon in the Florida pass, where they have placed that of the

Mississippi. These two unite at our feet, and pour their wealth along our shores.

For these and other reasons of import, the free navigation of the Amazon, and the settlement of the valley, become matters of deep interest to the world, and of especial interest to this country. Therefore it is incumbent upon this country to take the initiative in opening the trade and navigation of that river to the world. The policy of commerce requires it. In my next I shall treat of the means of accomplishing it, and of the rights which we have there.

INCA.

NATIONAL INTELLIGENCER.

THE AMAZON AND THE ATLANTIC SLOPES OF SOUTH AMERICA.—No. VII.

We now come to consider the means and modes by which the resources of this great Amazonian water-shed are to be developed, and the measures and steps which the policy of commerce suggests for securing to the world the free navigation of the Amazon.

The triumphs of commerce are peaceful; its achievements are seen in the spreading of civilization, in the march of civil and religious freedom, and in the dispensation of thrift, prosperity, and wealth among nations, as well as to individuals.

From the statements which I have already made, all must admit that the valley of the Amazon is not only a great country, but it is a glorious wilderness and waste, which, under the improvement and progress of the age, would soon be made to "blossom as the rose." We have, therefore, but to let loose upon it the engines of commerce—the steamer, the emigrant, the printing press, the axe, and the plough—and it will teem with life.

There is a line of steamers from England to Rio. The French are getting up a line, and the stock has been taken in it, from Marseilles to Rio. Brazil has a line from the mouth of the Rio de la Plata, via Rio, to the mouth of the Amazon. The mouth of the Amazon is half way between Norfolk and Rio. I petitioned Congress, at its last session, for the establishment of a line of mail steamers from some one of our southern ports to connect with the Brazilian line at Para, and thus put our merchants in direct steamship communication with Rio, Buenos Ayres, and Montevideo, and so draw us closer to the Amazon.

The committee to whom the subject was referred reported in favor of it, and brought in a bill for its accomplishment. It was, however, not acted upon.

But since that events have occurred which make this line from the South still more important and necessary. The tyrant Rosas has been expelled from the continent; the navigation of the Rio de la Plata and some of its noblest tributaries have been opened and made free to the world. This Government, with a most praiseworthy zeal, is fitting out a naval expedition to explore those streams, and to make known their navigability and the commercial resources of the countries drained by them, that our merchants may know how to send, what to sell, and what to buy there.

Brazil has contracted for two lines of steamers on the Amazon, from its mouth almost up to its sources. These Amazonian lines are to run—one monthly between Para and Barra, at the mouth of the Rio Negro, a distance of nine hundred miles; the other, connecting with this at Barra, is to ply between that city and Nauta, in Peru, a distance of near three thousand miles from the sea. "Poling up the Mississippi" would, in comparison to the means at present employed for navigating the waters of the Amazon and La Plata, be considered rapid travelling. Here, therefore, is the commencement of a new era in the business and the commerce of those two river-basins; and the first merchant steamer, as she ploughs up those majestic streams with her rich cargo of foreign merchandise, will be the signal for a revolution in the trade and traffic as has been carried on there.

Three millions of dollars' worth of produce now comes down the Amazon to Para.

The Peruvian portion of the upper Amazon "where this line of steamers is to go," "is," said Castelnau, who was then on his way home, after travelling through the fairest parts of South America, "the Peruvian portion of the Amazon is the most beautiful country in the world; its fertility is proverbial." There is found the famous silk tree, which produces a staple like cotton to the eye, but silk to the touch. There the labor of one man is worth but two and a half yards of our coarse cotton stuff the month—so abundant are the fruits of the earth, so scarce the fabrics of the shop and loom, and so far has that country been removed from the influences of commerce. It is now just about to be brought within them.

But what are the opportunities which Americans will have for getting a fair share of this new business to which the free navigation of the La Plata and the introduction of steam upon the Amazon will give rise? I reply, very small, unless this southern line of steamers to the Amazon be established; otherwise all the intelligence from Brazil and the La Plata, all the advices concerning the markets, will go direct to England and to France by their steamers; and then, after the merchants there shall have had some ten days or two weeks the start of their American competitors in taking advantage of that intelligence, it will arrive here in the United States by the Cunard or Collins line of steamers from Liverpool.

Now and then an American clipper, happening at the mouth of the river, or in the offing at Rio, at the night time, may chance to bring intelligence to the United States sooner than it can go to Europe and then come over by steamer. But that is uncertain.

The free navigation of the Rio de la Plata is an achievement, and commerce is chiefly indebted to Brazil for it. Honor to Brazil, therefore. It is a gem in the crown of the Emperor, which, if it be tarnished not, will make his reign illustrious.

Rosas held the mouth of the river La Plata; Brazil Banda-Oriental, Paraguay, and Bolivia, (all independent sovereignties,) owned navigable watercourses which emptied into it; but Rosas would not allow any of these Powers to follow those waters through his part of the river to the sea. Brazil made war with him, drove him out of the country, and the first fruits of the victory the commercial world is about to receive is the free navigation of those noble streams.

With a quarrel more just than that wicked one about opium, Brazil, in her triumph, followed the generous example of England in opening the ports of China, without any claim to exclusive privileges.

Brazil has not opened the ports of so populous a country as China, but she has opened the watercourses of one with which commerce will in a few years be more valuable than it is with China.

These arrangements about the La Plata navigation are not completed. They are thought to be in a fair way of adjustment; and, therefore, in giving honor to whom honor is due, I give it to the Emperor of Brazil, upon the supposition that no untoward thing will occur to thwart the measure.

But the commercial world has been sparing of its commendations of Brazil for her seeming liberality with regard to the free navigation of the La Plata. They say—and have, alas! but too much reason for saying—that there was no generosity, no liberality, no sign of any fairness whatever, in the course of Brazil with regard to the navigation of the La Plata. Bolivia, Paraguay, and Banda-Oriental, they say, had each as much right as Brazil to claim the free use of the La Plata for getting to sea with their merchandise; and if, upon the fall of Rosas, Brazil had then attempted to extort from Buenos Ayres any exclusive privilege in the use of those waters, she knew that not only would these republics—her next-door neighbors—all have turned against her, but that the three great commercial nations of the north would have stepped in to prevent any such exclusive and selfish appropriation of Nature's highways.

As a proof that Brazil was not actuated by any of those really enlarged and liberal views which it is the policy of commerce to carry out, I point to the Amazon. There Don Pedro is the Rosas. He holds the mouth of the Amazon; he shuts it up. Five sovereign and independent nations own its headwaters, and all of them have provinces and people upon the banks of its navigable tributaries; but not one of them is allowed to follow the

course of these navigable streams through Brazilian waters to the sea.

Justice, the policy of commerce, the sentiment of the age, all the principles of national law and the rights of people, are in favor of the free use of that river by those five Spanish republics; and it cannot be said that Brazil acted from principle in the case of the La Plata until she makes, of her own accord, the navigation of the Amazon free.

Formerly there was a Rosas who threatened to stand at the mouth of our Mississippi, and we, who then owned the headwaters only, claimed, and were ready to assert with the sword, our right to follow them, and to use them for commerce and navigation, until they mingled with and were lost in the sea.

It has now not been quite four years ago since this subject of the free navigation of the La Plata and the Amazon was brought to the attention of this Government.

The proposition was, that we should offer to Brazil our friendly mediation with Rosas, and use our kind offices to induce him to make free the navigation of the La Plata, and so end the war.

It was proposed, also, that we should treat with Bolivia, Peru, Ecuador, New Grenada, and Venezuela for ports of entry to foreign vessels and commerce up their navigable tributaries of the Amazon, and thus turn upon Brazil with the same arguments for the free navigation of the Amazon that Brazil stood ready to urge in favor of her right to navigate the La Plata.

Brazil got wind of this. She found out that such a thing as the free navigation of the Amazon began to form the subject of conversation in commercial and political circles here, and she immediately took the most active steps to render of no avail any attempt on our part having for its object the free navigation of the Amazon.

She redoubled her energies in the war against Rosas, and she dispatched in hot haste Ministers Extraordinary and Plenipotentiary to Peru, to Bolivia, to Ecuador, and New Grenada, and Venezuela, to treat with each of those five Spanish-American Republics for the *exclusive* right to navigate their Amazonian tributaries.

For the Portuguese, who had owned the Amazon for ages, who had not had the power to make an impression upon its forests, nor to launch a steamer upon its bosom, to go and talk to the Bolivians and others about sending steamers away up the main trunk of the Amazon, to paddle up and down the republican spring-branches of the Spanish-Americans, was truly a diplomatic phenomenon! "You have an Athens, embellish that," should have been their reply to Brazil.

I quote from the Rio correspondent of the "Observator"—a Brazilian newspaper—of May last. This correspondent appears to be in the secrets of the Government, and no doubt spoke the sentiments of that jealous Cabinet:

"The navigation of the Amazon goes on swimmingly: the Government of Peru, by the convention of the 23d of last October, made with our new Minister, Duarte da Ponte Ribeiro, obliges itself to assist the first enterprise established upon the Amazon with a sum never less than $20,000.

"The Government has named in quality of resident Minister, and for an extraordinary mission near the Governments of the republics of Venezuela, Ecuador, and New Grenada, our Minister to Bolivia, Miguel Maria Lisboa. The object of this mission is a treaty with those republics for the navigation of the Amazon, because, as I think, it is feared that the United States will hasten to arrange one for the navigation of some of the tributaries of the Amazon, and thus judge themselves authorized to enter the Amazon from without, as the journals of New York and New Orleans already propose. We have been careless in this matter, and must not hurry about it.

"This nation of pirates, like those of their race, wish to displace all the people of America who are not Anglo-Saxons."

Thus the objects of Da Ponte's mission to Peru and Bolivia, and of Lisboa's to Venezuela, New Grenada, and Ecuador, are clearly set forth.

They were to frustrate any attempts at treaty the commercial nations might be disposed to make with these republics touching river navigation, and to seal up tighter than ever the great arteries of those countries, and thus perpetuate the stagnation and death that have for three hundred years reigned in the great Amazonian watershed.

Brazil seemed already to have forgotten that what was right on the south side of the Tropic of Capricorn must be right also under the Equator; for the same arguments that apply to the free navigation of the La Plata apply also to the free navigation of the Amazon.

Peru fell into the trap, and made the required treaty; but the more sagacious statesmen of Bolivia got wind of the design, and not only refused to treat with Brazil upon the subject, but the enlightened President of that republic proposes to establish upon the Amazonian tributaries of Bolivia free ports to all the world.

"*Como los Brazileros*," says a gentleman of Bolivia, writing as to this pretension of Brazil to steamboat navigation upon the rivers of Bolivia, "*pretenden el privilejio, y el Presidente Belzu, es bastante capas para conocer lo que le conviene a Bolivia, el se ha negado a dar dicha concesion, y espera qui los Estados Unidos sevan los primeros en descubrier aquellos rejiones.*"*

Moreover, as the good genius of Amazonia and free navigation would have it, neither the Brazilian nor the Peruvian Plenipotentiary appeared to have a sufficient knowledge of the subject of which the two were treating. They evidently knew very little of the navigability of those waters, the monopoly of which they aimed to secure.

This treaty was secretly negotiated in Lima last October twelve months, and was ratified in Rio two or three months ago only. I have a manuscript copy of it before me. Its title is "A treaty of fluvial commerce and navigation and of boundary between the republics of Peru and the empire of Brazil."

The question of boundary was settled in two words: "*Uti possidetis.*"

I quote with regard to the river steamboat navigation:

"ARTICLE FIRST.—The republic of Peru and his Majesty the Emperor of Brazil, desiring to encourage, respectively, the navigation of the river Amazon and its confluents by steamboats, which, by ensuring the exportation of the immense products of those vast regions, may contribute to increase the number of the inhabitants and civilize the savage tribes, agree that the merchandise, produce, and craft passing from Peru to Brazil, or from Brazil to Peru, across the frontier of both States, shall be exempt from all duty imposts, or sale duty (alcabala) whatsoever, to which the same products are not subject in the territory where produced; to which they shall be wholly assimilated.

"ARTICLE SECOND. The high contracting parties, being aware of the great expense attending the establishment of steam navigation, and that it will not yield a profit during the first years to the shareholders of the company destined to navigate the Amazon from its source to the banks (litoral) in Peru—which should belong exclusively to the respective States—agree to give to the first company which shall be formed a sum of money during five years in aid of its operations; which sum shall not be less than twenty thousand dollars annually for each of the high contracting parties, either of whom may increase the said amount, if it suits its particular interests, without the other party being thereby obliged to contribute in the same ratio.

"The conditions to which the shareholders are to be subject, in consideration of the advantages conceded to them, shall be declared in separate articles.

"The other conterminous States which, adopting the same principles, may desire to take part in the enterprise upon the same conditions, shall likewise contribute a certain pecuniary quota to it."

"SEPARATE ARTICLES.

"For the better understanding of Article 2 of the con-

* "As the Brazilians claim the privilege, and as President Belzu understands the interests of Bolivia, in the matter, he has refused to make any such concessions, and hopes the United States will be first to explore those regions."

...signed this day, the high contracting parties have further agreed to the following articles:

"ARTICLE FIRST. The shareholders of the steam navigation mentioned in the second article of the convention concluded on this date shall be bound to the following conditions:

"1st. The steamboats shall make three voyages the first year, four in the second, and at least six voyages in the third, fourth, and fifth.

"When, owing to circumstances arising from the great distance, obstruction of the river, making experiments connected with its navigation, want of combustibles, or other weighty reasons, it may be impossible to make that number of voyages, the shareholders shall receive only five thousand dollars for every voyage that the boats make during the two first years, and three thousand dollars for every one made during the third, fourth, and fifth.

"2d. They shall convey free of charge the mail-bags of the Government and of the post office, and deliver them at the places on the banks as they pass along, until the end of the voyage.

"3d. They shall also convey every voyage, passage free, four civil, military, or ecclesiastical officers in the service of each Government; the luggage of these persons in quantity equal to that of other passengers, and the packages that each Government may in particular wish to send, provided they do not exceed two tons.

"4th. They shall be obliged to take on board or in tow the troops, ammunition, and effects that the two Governments may wish to send, receiving therefor an equitable remuneration—the amount of which shall be fixed as soon as it shall be ascertained what is the necessary cost of performing said service.

"5th. The company shall arrange with both Governments touching the respective points on the river Amazon or Marañon to which the steamboats shall navigate, and concerning the ports at which they are to touch, and it shall be subject to the fiscal and police regulations, notwithstanding their being liberated from imposts of every kind.

"ARTICLE SECOND. Each Government shall grant to the company the propriety of one-fourth part of a league square, at the places in which it may be necessary to establish a depot for combustibles, at any point not belonging to private persons; but the title to the same shall be forfeited, unless the conditions above mentioned be complied with during the five years. It shall be lawful to cut wood for fuel on unoccupied lands, and to open and work coal mines."

Under this treaty, Brazil has entered into an agreement with Irineo Evangelista de Souza to introduce the river steamer upon the Amazon.

This contract was entered into on the 30th day of August last, and is one of the most odious monopolies that ever were inflicted upon free trade, or that now retards the progress of any country. A stringent monopoly of steamboat trade and travel on the Amazon for thirty years! The preamble to this contract states, that, in order to enable this Souza to form a company for the establishment of steam navigation upon the Amazon, the exclusive right for thirty years to the steamboat trade, travel, and navigation up and down that river has been granted to him upon certain conditions, the principal of which are these:

1st. The capital of the company shall never be less than $600,000, (1,200,000 $000.)

2d. There shall be two lines; one from Para, at the mouth of the Amazon, touching at the intermediate places, to Barra, at the mouth of the Rio Negro; the second, from Barra, touching as aforesaid, to Nauta, at the mouth of the Ucayali, in Peru.

3d. To the first line an annual subsidy of $80,000 (160,000 $000) is to be paid for the first fifteen years; and to the second line is to be paid the $20,000, which by the "treaty of fluvial navigation and commerce," of which I have already spoken, Peru obligated herself to pay.

4th. At the commencement, the first line is to make one round trip a month; the second, three a year.

The company, on the other hand, obligates itself to do certain things, and among these is to establish on the Amazon and its tributaries sixty colonies, which shall consist of Indians or emigrants from such nations as the Crown may designate.

The first thing in this treaty of "fluvial commerce and navigation" between Peru and Brazil that strikes one is the want of sagacity on the part of its negotiators, and the marvellous degree of infatuation by which Peru fell into the flimsy net that was so unskilfully spread before her.

When Peru was invited to treat upon this subject, and was told that Brazil wanted to introduce the river steamer upon Peruvian waters, there was, right at the mouth of the Amazon, the Tocantins, a most magnificent stream. It crosses more parallels of latitude than our Mississippi or Missouri; it lies wholly within Brazilian territory; the banks of its upper tributaries are enlivened with towns and villages, and peopled with 125,000 subjects of Brazil; it takes its rise in the very heart of the empire, and from the Emperor's palace at Rio to the headwaters of this noble river the distance is not five hundred miles; and yet, with all the enterprise of Brazil, she had not been able to put, or to muster energy enough to make the attempt to put, a single steamer upon this river. It was a little surprising, then, that the suspicions of Peru were not excited; for there was something strange to see this Brazilian envoy passing by the mouth of the noble Tocantins at home, which his own countrymen, with their dugouts and rude crafts, can ascend only at the rate of seven miles a day. It was strange, I say, to see this envoy leaving the rivers in his own country in such a condition and travelling thousands of miles up the Amazon to propose to Peru to send Brazilian steamers to navigate among the Andes her tributaries of the Amazon.

Besides this, there are the Chingu and the Tapajos, with a dozen other noble streams lying wholly within Brazilian territory. Some of them come from "mountains of diamonds," and gold is in the beds of all of them. They are all strangers to the steamboat. Their sources are so completely lost in the unknown regions of the vast interior of Brazil that we are far better acquainted with the geography of the moon than we are with that of these rivers; and yet, seeing that and how that Government had neglected them all, Peru could still be induced to listen to its shallow propositions.

Nay, there is the beautiful river of San Francisco, which empties directly into the sea, and the headwaters of which are just behind the first range of hills in the rear of the capital of the empire. Without having had the energy to introduce the steamboat even upon the waters of this river, the Chevalier Da Ponte is sent off upon this shallow mission about the headwaters of the Amazon, which by fatuity the diplomatists of Peru, it seems, could not fathom.

This attempt of Brazil to negotiate with those five Amazonian republics can be considered in no other light than an attempt to stop the progress of civilization; for to close the Amazon to commerce and the steamboat is to shut out from that benighted country, which it drains, the lights of civilization, the blessings of Christianity, and all the elements of human happiness!

But the treaty! The Brizilian Minister, I am told, did not hesitate privately to advance the sentiment, when in Lima, that it was not the policy of Brazil to treat with nations more powerful than herself; that in the interpretation of treaties the stronger Power always enforced its own construction, and the weaker as invariably went to the wall.

At any rate, I shall show how faithfully Brazil has acted up to this policy in the case of this treaty with Peru. By it each of the contracting parties pledged itself to give annually a sum not less than $20,000 for the introduction of the steamboat upon the waters of the Amazon; and what has been the result? Why, this: Brazil, as we have seen by the Souza contract, has taken this $20,000 of Peruvian money and given it to one of her own subjects to establish a line of steamers under her own flag from the mouth of the Rio Negro to Nauta—that is, it is to run about 1,500 miles through Brazilian territory, and when it gets a few miles into Peru to stop short. But still Peru must pay the piper. When this line reaches the mouth of the Rio Negro it is to feed there with its freights another line under the Brazilian flag to Para.

Thus Peru, to get about 250 miles of her thousands of miles of navigable waters navigated by steam, is made to pay Brazilian bottoms and subjects for navigating 1,500 miles for Brazilian waters!

I have no pleasure in exposing this miserable trickery of the court of Brazil. But she has arrayed herself against the improvements and the progress of the age, and she has attempted by intrigue so to shape the course of events that she might lock up and seal with the seal of ignorance and superstition and savage barbarity the finest portions of the earth.

Science, commerce, and the wants of mankind are beginning to call loudly for admittance there; and up the Amazon they must and will go, for when they call the world is right apt to heed.

The object of Brazil in negotiating this treaty with Peru was, as we have seen by the Rio correspondent of the "Observator" already quoted, to exclude "this nation of pirates," as we are there styled, from these water-courses.

But the "high contracting parties," as it often happens to the wicked, fell themselves into the net which they had spread for other feet; for they seem not to have recollected the provisions of a treaty which Randolph Clay, our most skilful and accomplished representative in Lima, had just negotiated with Peru.

Only three months before the date of this fluvial treaty, that excellent diplomatist had negotiated in Lima a "treaty of friendship, commerce, and navigation with Peru."

By the 10th article of that treaty it is set forth that—

"The republic of Peru, desiring to increase the intercourse along its coasts by means of steam navigation, hereby engages to accord to any citizen or citizens of the United States, who may establish a line of steam vessels to navigate regularly between the different ports of entry within the Peruvian territories, the same privileges of taking in and landing freight, entering the by-ports for the purpose of receiving and landing passengers and their baggage, specie and bullion, carrying the public mails, establishing depots for coal, erecting the necessary machine and workshops for repairing and refitting the steam vessels, and all other favors enjoyed by any other association or company whatsoever.

"It is furthermore understood between the high contracting parties that the steam vessels of either shall not be subject in the ports of the other party to any duties of tonnage, harbor, or other similar duties whatsoever, than those that are or may be paid by any other association or company."

By the 3d article it is agreed that—

"The two high contracting parties hereby bind and engage themselves not to grant *any favor, privilege*, or immunity whatever, in matters of commerce and navigation, to *other nations* which shall *not be also immediately extended to the citizens of the other contracting party*, who shall enjoy the same gratuitously, if the concession shall have been gratuitous, or, on giving a compensation as nearly as possible of proportionate value and effect, to be adjusted by mutual agreement if the concession shall have been conditional."

And, finally, by the 2d article it is declared that—

"The United States of America and the republic of Peru mutually agree that there shall be reciprocal liberty of commerce and navigation between their respective territories and citizens; the citizens of either republic may frequent with their vessels all *the coasts, ports*, and *places* of the other wherever (enque) *foreign* commerce is permitted, and reside in all parts of the territory of either, and occupy dwellings and warehouses; and everything belonging thereto shall be respected, and shall not be subjected to any arbitrary visit or search.

"The said citizens shall have full liberty to trade in all parts of the territories of either, according to the rules established by the respective regulations of commerce, in all kinds of goods, merchandise, manufactures, and produce not prohibited to all, and to open retail stores and shops, under the same municipal and policce regulations as native citizens. * * * *

Thus Brazil, instead of treating us *out* of the Amazon, has treated us into it; for, by solemn stipulations with Peru, *American citizens had already the right to frequent with their vessels* all the coasts, ports, and places in Peru wherever foreign commerce is or may be permitted.

And, furthermore, in this treaty Peru binds and engages herself not to grant any "favor, privilege, or immunity whatever, in matters of commerce and navigation, to other nations, which shall not be also *immediately extended* to the citizens of the" United States.

Thus, therefore, this treaty of "fluvial navigation and commerce" between Peru and Brazil has let us into the Amazon, *so far as Peru can let us in;* for we have the same right to trade upon her Amazonian tributaries that Brazil has.

Moreover, Lieut. Herndon informs me that the vessels of Brazil that go poling about the Amazon and its Spanish-American tributaries are in the habit of visiting all places and ports in these republics, without let or hinderance. They gather the products of the forests and the staples of the country *ad libitum;* in short, that the Brazilians enjoy there a perfect tree trade, there not being a custom-house or an excise officer in the whole valley, or a single restraint upon perfect freedom of trade, until you get down into Brazil.

We have, therefore, in the Amazonian provinces, and upon the Amazonian waters of Peru, all the rights and privileges that Brazil has, IF WE CAN GET THERE.

Not only so: Peru, in 1850, published a decree which made her Amazonian provinces for a while the common property of the world.

When that gold-exploring party of which I have already spoken returned with their seven hundred pounds' weight of gold, washed in gourds from the streams of this water-shed, the Ministers of Peru wrote letters and had them published, inviting all the world, in consequence, as they said, of these discoveries of the ore and washings of gold in her province of Carabaya, to come and take advantage of them, and make use of the natural productions of those regions; and the world was assured that the emigrants of all nations going there should have all civil and religious liberty.

But this invitation fell still-born, because the Andes, with their snow-capped summits, and the long, boisterous, and dangerous passage of Cape Horn, stood up on one hand as a barrier to keep out the immigrant by way of the shores of the Pacific, and on the other hand Brazil closed up the Amazon against his passage up from the Atlantic ocean.

Hence arises the question of the day—that of the free navigation of the Amazon.

The question as to the free use for navigation of a river which runs through the dominions of more than one Power is a familiar one to statesmen. It has been settled upon the everlasting principles of right long ago, and cannot now admit of dispute.

In Europe the navigation of the Rhine is conceded as a right in common to those to whom its waters belong. In North America it is a right—this free use of waters that are common property—which involves principles very dear to the people. The Mississippi is an illustration of this fact; for the people do not forget that the mouth of that river was once in foreign hands that threatened to shut it up to us of the great West when we were owners of its head navigable waters only, and not of its mouth.

It is a right which, in the case of Texas, we practically conceded to her citizens with regard to the Red river without the asking, when she was an independent republic.

It is a right which the United States have always claimed with regard to the St. Lawrence, but which we have never thought worth a contention, because for all, or rather for a very great many, of the practical purposes of life our people have brought the commercial mouth of the St. Lawrence down by railroad and canal from the straits of Belle Isle, and placed it at Sandy Hook.

Canadian merchants and English subjects pay tolls to our railroads and canals for taking their produce to New York and a market. We therefore do not care to see the St. Lawrence opened.

In South America it is a right which Brazil has asserted on the La Plata, even to the "*ultima ratio*," when she was one of the upper countries.

The United States, therefore, are committed to this principle; and Brazil is committed to it.

We have contended for it here on the north side of the Tropic of Cancer; Brazil has fought for it under Capricorn; and we must both stand up for it together under the Equator.

But, in the case with us on this side of the line, there were never more than two nations concerned in the navigation of a single water-course. Here in South America there are a dozen; and this makes the case so much the stronger in favor of a liberal policy on all sides with regard to this question.

In case of the Rio de la Plata, the up-countries which Rosas cut off from the sea were the Banda-Oriental, Brazil, Paraguay, and Bolivia, not to mention Uruguay, Corrientes, Entre-Rios, Sante Fe, and some half a dozen other States, which were in such an anomalous condition that one knew not whether to class them as nations or anarchies.

In case of the Amazon, there are five different republics in the up country, with Brazil at the mouth of the river; not one of these five has the means or the power

to force her way down, and Brazil will not let them come down peaceably. The Amazon, therefore, presents a question for which, as there is no river-basin equal to it, there is no precedent.

We have the right from Peru to navigate her tributaries, *if we can get to them.* Bolivia is talking of making hers as free to all as is the sea. Ecuador is inclined to do the same; and both New Grenada and Venezuela will no doubt follow suit the moment they are invited so to do.

We have heard of the question before as to "free goods and free bottoms." But here the question is whether "free ports make free rivers."

Suppose these five Spanish-American republics should all proclaim one or more of their river towns upon the Amazon free ports to the commerce of the word; and suppose that Brazil, instead of owning two thousand miles or more of this river, after it passes the borders of these republics, owned only two miles, would any one pretend that Brazil in such a case would have the right to control the navigation of the whole river and its valley, because its mouth happened to pass through two miles of her territory just before entering the sea?

The doctrine that concedes to any one nation the arbitrary right to shut out other nations from the common highway of the world is monstrous.

The arbitrary right even to shut one of the citizens of this nation from the public highways is not possessed by any of our governors. And if his neighbors *must* allow him free passage through their own lands to the common market-way, with how much more force does this humane principle of right apply to nations and their right to follow, through neighboring territory, the great thoroughfares which nature has constructed to lead from the interior of the land out upon the broad ocean, the great highway of the world?

Brazil has no more right, in consequence of her two thousand miles of Amazon between these people and the sea, to shut them up and out from the highways of commerce than she would in the supposed case of two miles.

The policy of the United States is the "policy of commerce," and we do not wish ever to be on any terms with Brazil but those of peace and good-will. We buy now half of all her coffee, and coffee is her great staple. She is a good customer of ours too, and we value highly our present friendly relations with her; but, as highly as we value them, we value still more the everlasting principles of right.

We want nothing exclusive up the Amazon; but we are nearer to the Amazon, or rather to the mouth of it, than any other nation, not even excepting Brazil herself, if we count the distance in *time*, and measure from Rio de Janeiro, and from New York or New Orleans as the centres of the two countries. And, therefore, it may well be imagined that this miserable policy by which Brazil has kept shut up, and is continuing to keep shut up, from man's—from Christian, civilized, enlightened man's—use the fairest portion of God's earth, would be considered by the American people as a nuisance, not to say an outrage.

China wants to trade with us, but Japan stands by the way-side, and shuts herself up and out of the world. She is not in the fellowship of nations, and we send a fleet there to remind her that she cannot be in this world and live out of it at one and the same time. God has put the land she occupies on this earth, and she cannot take it away by her policy.

The five Spanish-American republics want to trade up and down the Amazon; but Brazil, worse than Japan on the wayside, stands right in *the doorway*, and says, "Nay, I will neither use the Amazon myself nor permit others to use it. That great up-country shall remain a social and a commercial blank."

Is it the policy of the great commercial nations to permit that? No; it is no more their policy than a state of war, and not of peace, is their policy.

In fine, the people of this country cannot look with indifference at the policy Brazil has pursued, and seems disposed to continue to pursue, with regard to the Amazon.

She and her rulers have had it for three hundred years, and the first practical step towards subduing it and developing its resources has yet to be taken.

Under these circumstances, it appears to me that Brazil, if she persist in her dog-in-the-manger policy with regard to the Amazon and the countries drained by it, runs some risk of getting up a discussion among the enlightened and commercial nations as to what her rights are to the Amazon, and whether they are not in danger of being forfeited by non-usage.

This certainly is the question of the day. The problem of the age is that of the free navigation of the Amazon and the settlement of the Atlantic slopes of South America.

It is to stand out in after times, and among all the great things which this generation has already accomplished, as *the* achievement in its way of the nineteenth century. But it is not to be worked out by the hand of violence or the strong arm of power. It is for science, with its lights; diplomacy, with its skill; commerce, with its influences; and peace, with its blessings, to bring about such a great result, as would be the free navigation of the Amazon—the settlement and cultivation of the great Atlantic slopes of South America.

With many thanks, Messrs. Editors, for lending so many columns of your valuable journal to me and this subject, I conclude.

Very truly, yours, INCA.